# **Isola Laminate Systems Table of Contents**November 10, 2003

GENERA)	L CONDITIONS	Page 1	
1.	AIR POLLUTION PROHIBITED.	Page 1	
2.	CIRCUMVENTION	Page 1	
3.	3. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENES		
4.	COMPLIANCE	Page 2	
	A. Compliance Required		
	B. Compliance Certification Requirements		
	C. Compliance Plan.		
5.	CONFIDENTIALITY CLAIMS	Page 3	
6.	CONTINGENT REQUIREMENTS	Раде 3	
0.	A. Acid Rain.	0	
	B. Asbestos.	_	
	C. Risk Management Plan (RMP)		
	D. Stratospheric Ozone Protection		
7.	DUTY TO SUPPLEMENT OR CORRECT APPLICATION	Page 5	
8.	EMERGENCY EPISODES	Page 5	
9.	EMERGENCY PROVISIONS	Page 5	
10.	EXCESS EMISSIONS	Page 6	
11.	. FEES		
12.	MODELING	Page 8	
13.	MONITORING / TESTING	Page 8	
14.	PERMITS	Daga 0	
14.	A. Basic	0	
	B. Dust Control Plan Requirements.	•	
	C. Permits and Permit Changes, Amendments and Revisions		
	D. Posting.		
	E. Prohibition on Permit Modification		
	F. Renewal		
	H. Revision Pursuant to a Federal Hazardous Air Pollutant Standard		
	I. Requirements for a Permit	•	
	J. Rights and Privileges	•	
	K. Severability.	_	
	ix. Develacitity	1 agc 12	

	L.	Scope	. Page 13
	M.	Term of Permit.	. Page 13
	N.	Transfer	Page 13
15.	REC	CORDKEEPING	. Page 13
	A.	Records Required	. Page 13
	B.	Retention of Records.	. Page 13
	C.	Monitoring Records	Page 14
	D.	Right of Inspection of Records.	Page 14
16.	REP	PORTING	Page 14
	A.	Annual Emission Inventory Report	Page 14
	B.	Data Reporting.	Page 14
	C.	Deviation Reporting.	Page 15
	D.	Emergency Reporting.	. Page 15
	E.	Emission Statements Required as Stated in the Act	
	F.	Excess Emissions Reporting	
	G.	Other Reporting.	
17.	RIG	HT TO ENTRY AND INSPECTION OF PREMISES	Page 16
CDECIEI		NOTIONS	Da == 10
		NDITIONS	
18.			
	A.	Facility-Wide	
	B.	Dust Generating Operations.	
	C.	Treater 2	-
	D.	Fugitive Dust Sources.	-
	E.	Plate Finishing Machine	. Page 21
19.		ERATIONAL LIMITATIONS AND STANDARDS	
	Α.	Facility-Wide	
	В.	Treaters 1-3, Batch Compounding Tanks, Blend Tanks, Dicy Tanks	
	C.	Parts Washer and Wipe Cleaning Activities.	
	D.	Edge Trimmers 1-3, Sheeters 2-3, Central Vacuum System, Dicy Tanks 1-3.	•
	E.	Baghouses	
	F.	Fugitive Dust Sources.	
	G.	Plate Finishing Machine.	
	H.	Wet Scrubber	. Page 35
20.	MO	NITORING AND RECORDKEEPING REQUIREMENTS	. Page 37
	A.	Facility-Wide	. Page 37
	B.	NSPS Subpart VVV	Page 39
	C.	Thermal Oxidizers and Rule 336.	
	D.	Treater 2	Page 42
	E.	Solvent Cleaning Activities.	Page 43
	F.	Baghouses	Page 44
	G.	Fugitive Dust Sources	
	H.	Wet Scrubber	. Page 46
21.	REP	PORTING REQUIREMENTS	Page 47

	A.	Facility-Wide	Page 47
	B.	Treaters	
	C.	Treater 2	
	D.	Parts Washer and Wipe Cleaning Activities	
23.	TES	STING REQUIREMENTS	Page 49
	A.	Thermal Oxidizers	Page 49
	B.	Wet Scrubber	Page 50
	C.	Baghouse	
22.	OT	HER REQUIREMENTS	Page 52
	A.	Dust Control Plan Required.	<u> </u>
	B.	Permit Shield	
	C.	MACT Standard	Page 53
APPENDI	IX A:	EQUIPMENT LIST	Page 54
APPEND	IX A:	PERMIT SHIELD	Page 56

#### Permit Conditions Isola Laminate Systems V95-016 November 10, 2003

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under Section 304 of the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

#### **GENERAL CONDITIONS:**

#### 1. AIR POLLUTION PROHIBITED:

[County Rule 100 \$301] [SIP Rule 3]

The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or State Implementation Plan (SIP) Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEO).

#### 2. **CIRCUMVENTION:** [County Rule 100 \$104] [40 CFR 60.12] [40 CFR 63.4(b)]

The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.

#### 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:

[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e] Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

#### 4. **COMPLIANCE:**

A. COMPLIANCE REQUIRED:

- The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]

  [County Rule 210 \$\$301.8b(4) & 302.1h(1)]
- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 \$302.1h(2)]

3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 \$302.1(h)(6)] [SIP Rule 220 \$302.1]

Compliance with the RACT requirements of this Permit Condition for nitrogen oxides (NO<sub>x</sub>) shall not be required if a waiver granted by the Administrator under Section 182 (f) of the Clean Air Act is in effect.

4) For any major source operating in a nonattainment area designated as serious for PM<sub>10</sub>, for which the source is classified as a major source for PM<sub>10</sub>, the source shall comply with the best available control technology (BACT), as defined in County Rule 100.

[County Rule 210 \$302.1(h)(7)]

### B. COMPLIANCE CERTIFICATION REQUIREMENTS: [County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status:
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter.

#### C. COMPLIANCE PLAN:

[County Rule 210 \$305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the release date of the proposed conditions for this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

#### **5. CONFIDENTIALITY CLAIMS:** [County Rule 100 \$402] [County Rule200 \$411]

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS \$49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
- B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position. The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

If the Permittee submits information with an application under a claim of confidentiality under ARS 49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 \$301.5]

#### 6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

#### A. ACID RAIN: [County Rule 210 \$\\$302.1b(2) & 302.1f] [County Rule 371 \\$301]

- 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.
  - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.

- b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
  - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
  - (2) Exceedances of applicable emission rates.
  - (3) The use of any allowance prior to the year for which it was allocated.
  - (4) Violation of any other provision of the permit.
- B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 \$301.8 locally enforceable only]

The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

#### C. RISK MANAGEMENT PLAN (RMP):

[40 CFR 68]

Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G] If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

### 7. **DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 \$301.6]

If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide

additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

## **8. EMERGENCY EPISODES:** [County Rule 600 \$302] [SIP Rule 72.A.5. e, f & g] If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 \$302.

#### 9. EMERGENCY PROVISIONS:

[County Rule 130 \$\$201 & 402]

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210 \$302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### 10. EXCESS EMISSIONS:

[County Rule 140 \$\$103, 401 & 402]

NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 \$200.

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:
  - 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
  - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;

- 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
- 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
  - 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
  - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
  - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
  - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
  - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
  - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
  - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.

#### C. Affirmative Defense For Startup And Shutdown:

1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions

reporting requirements of these Permit Conditions and has demonstrated all of the following:

- a. The excess emissions could not have been prevented through careful and prudent planning and design;
- b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
- c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
- g. All emissions monitoring systems were kept in operation, if at all practicable; and
- h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.
- 11. FEES: [County Rule 200 \$409] [County Rule 210 \$\$302.1i & 401] The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.
- Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

#### 13. MONITORING / TESTING:

A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.

[County Rule 200 \$309] [SIP Rule 41]

B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 \$408] [County Rule 210 \$302.1.c] [County Rule 270 \$\$300 & 400] [SIP Rule 27]

- C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
  - 1) Sampling ports adequate for test methods applicable to such source.
  - 2) Safe sampling platform(s).
  - 3) Safe access to sampling platforms(s).
  - 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

#### 14. PERMITS:

A. BASIC:

[County Rule 210 \$302.1h(3)]

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

#### B. DUST CONTROL PLAN REQUIREMENTS:

- (NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)
- 1) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.

[County Rule 310 \$303.3] [SIP Rule 310 \$303.3]

2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.

[County Rule 200 \$305] [County Rule 310 \$303.4] [SIP Rule 310 \$303.4]

3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.

[County Rule 310 \$\$303.1 & 304] [SIP Rule 310 \$\$303.1 & 304]

4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.

[County Rule 310 \$303] [SIP Rule 310 \$303]

#### C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

[County Rule 200 \$\$301 & 308] [County Rule 210 \$\$301.4a, b, c, & 400]

- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.
- 2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 \$\$303.1a, 303.2, 405.4, & 406.4]

3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 \$301.4f]

4) No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

#### D. POSTING:

1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 \$311] [SIP Rule 22F]

2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 \$401] [SIP Rule 310 \$401]

E. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310] The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

#### F. RENEWAL:

[County Rule 210 \$\$301 & 302]

1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit

expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 \$308 and Rule 210 \$\$301 & 302.3.

[County Rule 210 \$\$301.2a, 301.4a, b, c, d, h & 302.3]

2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.

[County Rule 200 \$\$308 & 309] [County Rule 210 \$301.1]

3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 \$301.4f]

4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 \$403.2] [County Rule 210 \$\$301.4f & 301.9]

#### G. REVISION / REOPENING / REVOCATION:

This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 \$403.2.

[County Rules 200 \$402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit)* and shall reset the five year permit term.

[County Rules 200 \$402.1a(1) & 210 \$302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
  - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
  - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 \$402.1]

3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 \$407.3]

4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 \$302.1h(3)]

#### H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

#### I. REQUIREMENTS FOR A PERMIT:

Air Quality Permit: Except as noted under the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 \$301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

#### 2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a

permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 \$305]

3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 \$\$302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

#### J. RIGHTS AND PRIVILEGES:

[County Rule 210 \$302.1h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

#### K. SEVERABILITY:

[County Rule 210 \$302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

#### L. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 \$308] [SIP Rule 22H]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.
- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

#### M. TERM OF PERMIT:

[County Rule 210 \$\\$302.1a & 402]

This Permit shall remain in effect for no more than 5 years from the date of issuance.

#### N. TRANSFER:

[County Rule 200 \$404]

Except as provided in ARS 49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures under County Rule 210.

#### 15. RECORDKEEPING:

A. RECORDS REQUIRED: [County Rule 100 \$501] [County Rule 310 \$502] [SIP Rule 40 A]

The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced, and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

#### B. RETENTION OF RECORDS:

Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted

[County Rule 100 \$504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 \$\$302.1d(2)]

#### C. MONITORING RECORDS:

[County Rule 210 \$\$302.1d(1) & 305.1b(1)]

Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The name of the company or entity that performed the analysis;
- 4) The analytical techniques or methods used;
- 5) The results of such analysis; and
- 6) The operating conditions as existing at the time of sampling or measurement.

#### D. RIGHT OF INSPECTION OF RECORDS:

[County Rule 100 \$106] [SIP Rule 40 D]

When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

#### 16. REPORTING:

*NOTE:* See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. ANNUAL EMISSION INVENTORY REPORT: [County Rule 100 \$505] [SIP Rule 40 B] Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30, or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS \$49-476.01, ARS \$49-480.03 and ARS \$49-480.04.

#### B. DATA REPORTING:

[County Rule 100 \$502]

When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency, and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

#### C. DEVIATION REPORTING:

[County Rule 210 \$\$302.1e & 305.1c]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

#### D. EMERGENCY REPORTING:

[County Rule 130 \$402.4]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

#### E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 \$503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of  $NO_x$  and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as

described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

- F. EXCESS EMISSIONS REPORTING: [County Rule 140 \$500] [locally enforceable only] (NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)
  - 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
    - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.
    - b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
  - 2) The excess emissions report shall contain the following information:
    - a) The identity of each stack or other emission point where the excess emissions occurred;
    - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
    - c) The time and duration or expected duration of the excess emissions;
    - d) The identity of the equipment from which the excess emissions emanated;
    - e) The nature and cause of such emissions;
    - f) The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
    - g) The steps that were or are being taken to limit the excess emissions; and
    - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
  - 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.

#### G. OTHER REPORTING: [County Rule 210 §302.1h(5)]

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

#### 17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

[County Rule 100 \$105] [County Rule 210 \$305.1f] [SIP Rule 43]

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. To record any inspection by use of written, electronic, magnetic, and photographic media.

  [Locally enforceable only]

#### SPECIFIC CONDITIONS

#### 18. ALLOWABLE EMISSIONS LIMITATIONS

The allowable emission limitations of these Permit Conditions are based upon the facility as presently constructed and operated. They do not provide for facility changes or changes in the method of operation that would otherwise trigger new applicable requirements including New Source Review (NSR) or Best Available Control Technology (BACT).

#### A. Facility-Wide Requirements

1) The Permittee shall not allow overall emissions from the facility to be emitted into the atmosphere in excess of any of the following limits:

Pollutant	Daily Emissions Limits	Twelve Month Rolling
		Emission Limits*
VOC	588 lbs/day	98 TPY
HAPs total	414 lbs/day	69 TPY
Dimethyl Formamide	324 lbs/day	54 TPY
Methyl Ethyl Ketone	54 lbs/day	9 TPY
Methanol	36 lbs/day	6 TPY

<sup>\*</sup> The rolling twelve-month emissions shall be calculated by summing the total emissions over the most recent twelve calendar months

[County Rule 210§302.1b]

#### 2) Opacity

a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity, except as provided in County Rule 300§302.

[County Rule 300§301][Locally enforceable only]

b) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

3) Gaseous and Odorous Emissions: The Permitee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 § 300][SIP Rule 32A]

### B. <u>Dust Generating Operations (Edge Trimmer #1, Edge Trimmer #2, Edge Trimmer #3, Sheeters 2 –3, Central Vacuum and Dicy Tanks 1-2)</u>

1) The Permittee shall not discharge or cause or allow the discharge of particulate matter emissions into the ambient air from any affected operation in excess of the allowable hourly emission rate determined by the following equation:

$$E = 3.59 P^{0.62}$$

Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

[County Rule 311§301.1][SIP Rule 311§301.1]

2) The total process weight from all similar operations at a facility, plant or premises shall be used for determining the maximum allowable emissions of particulate matter.

[County Rule 311§302][SIP Rule 311§302]

#### C. <u>Treater 2 Requirements</u>

The Permittee shall not allow emissions from **Treater 2** to be emitted into the atmosphere in excess of any of the following limits:

Pollutant	Daily Emission Limits	Twelve Month Rolling
		Emission Limits
VOC	165 lbs/day	29 TPY
HAPs total	150 lbs/day	27 TPY
Dimethyl Formamide	120 lbs/day	21.8 TPY
Methyl Ethyl Ketone	15 lbs/day	2.8 TPY
Methanol	4.3 lbs/day	2.3 TPY
TSP	9 lbs/day	1.5 TPY
	-	
$PM_{10}$	9 lbs/day	1.5 TPY

<sup>\*</sup> The rolling twelve-month emissions shall be calculated by summing the total emissions over the most recent twelve calendar months.

[County Rule 210§302.1b]

### D. <u>Fugitive Dust Sources (Unpaved haul/access road, Open field for temporary equipment/scrap material storage)</u>

The Permittee shall not allow visible fugitive dust emissions to exceed 20% opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:

- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
  - a) Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
  - b) Apply water or other suitable dust suppressant twice per hour; or
  - Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content.
- 2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
- 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301 and Table 2][SIP Rule 310 §301 and Table 2]

#### E. Plate Finishing Machine Requirements

1) The Permittee shall not discharge or cause or allow the discharge of particulate matter emissions into the ambient air from the Plate Finishing Machine in excess of the allowable hourly emission rate determined by the following equation:

$$E = 3.59 P^{0.62}$$

Where:

E = Emissions in pounds per hour, and

P =Process weight rate in tons per hour.

[County Rule 311§301.1][SIP Rule 311§301.1]

2) The total process weight from all similar operations at a facility, plant or premises shall be used for determining the maximum allowable emissions of particulate matter.

[County Rule 311§302][SIP Rule 311§302]

#### 19. OPERATIONAL LIMITATIONS/STANDARDS:

#### A. Facility-Wide Operational Limitations

Material Containment Required: Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320\\$302][SIP Rule 32C]

2) Stack Requirements: Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[County Rule 320\$303] [SIP Rule 32D][Locally enforceable only]

### B. Operational Requirements for Treaters 1- 3, Batch Compounding Tanks, Blend Tanks, and Dicy Tanks

1) The Permittee shall install, operate and maintain a total enclosure around the coating operations identified as Treater 1, Treater 2, and Treater 3 and vent the captured VOC emissions from the total enclosure to a thermal oxidizer that is at least 97 percent efficient.

[40 CFR 60.742 b (2)][County Rule 360§301.73]

2) The Permittee shall install, operate and maintain a cover on each piece of affected coating mix preparation equipment (Batch Compounding Tanks 1-10, Blend Tanks 1-2, and Dicy Tanks 1-2) and vent VOC emissions from the covered mix equipment to a thermal oxidizer that is at least 97 percent efficient while preparation of the coating is taking place within the vessel.

[40 CFR 60.742 c (1)] [County Rule 360§301.73]

- 3) The operating Line Speed on Treater 2 shall be limited to 60 feet per minute. [County Rule 220§304.1] [County Rule 360§301.73]
- 4) The Permittee shall insure that the room surrounding a treater meets the permanent total enclosure requirements contained in 40 CFR 60.743 any time that the treater is in operation.

[40 CFR 60.743] [County Rule 360§301.73]

- 5) Criteria for permanent total enclosure:
  - a) The Permittee shall make sure that any natural draft opening shall be at least 4 equivalent opening diameters from each VOC emitting point. A

- natural draft opening shall be defined as any permanent opening in the enclosure that remains open during operation of the facility and is not connected to a duct in which a fan is installed.
- b) The Permittee shall make sure that the total area of all natural draft openings shall not exceed 5 percent of the total surface area of the enclosure's four walls, floor and ceiling.
- c) The Permittee shall make sure that the average facial velocity of air through all the natural draft openings is at least 3600 m/hr (200 fpm). The direction of air through all natural draft openings shall be into the enclosure.
- d) The Permittee shall keep all access doors and windows whose areas are not included in paragraph 5)b) of this permit condition and are not included in the calculation in paragraph 5)c) of this permit condition closed during the routine operation of the process

[40 CFR 60.743 b (1)] [County Rule 360§301.73]

6) The combustion temperature of Thermal Oxidizers 1, 2 and 3 shall be at least 1400 Degrees Fahrenheit. If a lower temperature is to be used, the Permittee shall first demonstrate through testing acceptable to the Control Officer that the lower temperature produces at least 97% VOC destruction efficiency with a carbon monoxide concentration of less than 100 parts per million by volume (ppmv).

[County Rule 210§302.1b]

- 7) Operation and Maintenance (O&M) Plans for the Thermal Oxidizers
  - a) The Permittee shall maintain an O&M Plan(s) for Thermal Oxidizers 1,2, and 3 and their monitoring devices.

[County Rule 336§306.2a][SIP Rule 336§306.2a]

b) The Permittee shall comply with all the identified actions and schedules provided in each O&M Plan.

[County Rule 336§306.2c][SIP Rule 336§306.2c]

c) The Permittee must fully comply with all O&M Plans that the Permittee has submitted for approval, but which have not yet been approved, unless notified otherwise by the Control Officer in writing.

[County Rule 336§306.4][SIP Rule 336§306.4]

8) A person shall cover and keep covered each VOC-containing material which is not currently in use. A person shall store finishing and cleaning materials in closed or covered leak-free containers.

[County Rule 336§304.1][SIP Rule 336§304.1]

9) A person shall store all VOC-containing materials intended for disposal including, but not limited to rags, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and their residues, in closed, leakfree containers which are legibly labeled with their contents and which remain covered when not in use.

[County Rule 336§304.2][SIP Rule 336§304.2]

#### C. Operational Requirements for 20 gal Parts Washer and wipe cleaning activities

- 1) Solvent Handling Requirements applicable to Parts Washer and Hand Wipe Cleaning Activities
  - a) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leakfree containers that are opened only when adding or removing material. Rags used for wipe cleaning shall be stored in closed containers when not in use. Each container shall be clearly labeled with its contents.
  - b) If a cleaning-solvent escapes from a container:
    - (1) Wipe up or otherwise remove immediately if in accessible areas.
    - (2) For areas where access in not feasible during normal production, remove as soon as reasonably possible.
  - (c) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.

[County Rule 331§301][SIP Rule 331§301]

- 2) Operational Requirements applicable to Parts Washer
  - a) Equipment Requirements for the Parts Washer:
    - (1) The Permittee shall provide a leakfree container (degreaser) for the solvents and the articles being cleaned.
      - (a) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
      - (b) No surface of any freeboard required by this rule shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.

[County Rule 331§302.1] [SIP Rule 331§302.1]

(2) The Permittee shall maintain and operate all cleaning machine equipment required by this rule and any of its emission controls required by this rule.

[County Rule 331§302.2] [SIP Rule 331§302.2]

- b) Specific Operating & Signage Requirements for the Parts Washer:
  - (1) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:
    - (a) Comfort fans shall not be used near cleaning machines;
    - (b) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;
    - (c) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;
    - (d) If using a cleaning-solvent spray system:
      - (1) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
      - (2) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten psig and shall not cause liquid solvent to splash outside the solvent container.
      - (3) In an in-line cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
    - (e) The permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;
    - (f) The permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;
    - (g) The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface (20 m³/min/m²), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements;
    - (h) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and (11) eleven ft/min (3.3 m/min);
    - (i) The permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.

[County Rule 331§303.1] [SIP Rule 331§303.1]

(2) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the permittee shall provide the following signage requirements on the

machine, or within 3½ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:

- (a) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
- (b) "Drain parts until they can be removed without dripping."
- (c) "Do not blow off parts before they have stopped dripping."
- (d) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
- (e) "Don't leave cloth or any absorbent materials in or on this tank."
- (f) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from \_\_\_\_\_" where the Permittee shall list a person or place where the instructions are available.

[County Rule 331§303.2] [SIP Rule 331§303.2]

#### c) Solvent Specification

All cleaning solvents, except Low-VOC Cleaners, shall be conforming solvents. A conforming solvent is one which has a total VOC vapor pressure at 68°F (20°C) not exceeding 1 millimeter of mercury column maximum total VOC vapor pressure.

[County Rule 331§304][SIP Rule 331§304]

#### d) Batch Cleaning Machines

The permittee shall equip each batch cleaning machine with remote reservoir, including the cabinet type(s), with the following:

- (1) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.
- (2) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5. square inches (100 cm<sup>2</sup>).
- (3) Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.

[County Rule 331§305.1][SIP Rule 331§305.1]

### D. <u>Edge Trimmer # 1, Edge Trimmers # 2 and 3, Sheeters 2-3, Central Vacuum System, and Dicy Tanks 1-2</u>

[County Rule 311§305][SIP Rule 311§305]

- 1) Sheeters # 2 and 3 operations shall be conducted with exhaust vented, without bypass through the Torit and Day 49-PJD Dust Collector or an equivalent approved control device.
- 2) Edge Trimmer # 1 operations shall be conducted with exhaust vented, without bypass through the Torit TJ-460-155 Dust Collector or an equivalent approved control device
- 3) Edge Trimmers # 2 and 3 operations shall be conducted with exhaust vented, without bypass through the Torit and Day 49-PJD Dust Collector or equivalent approved control device.
- 4) Central Vacuum System operations shall be conducted with exhaust vented, without bypass to the Lamson Dust Collector or an equivalent approved control device.
- 5) Dicy Tanks 1 and 2 operations shall be conducted with exhaust vented, without bypass to the Torit 90-H55 Dust collector or an equivalent approved control device.

#### E. Baghouse Requirements

[County Rule 311§306][SIP Rule 311§306]

- 1) The baghouses shall be operated and maintained in accordance with the requirements of the Operation and Maintenance Plan (O&M) most recently approved in writing by the Control Officer.
- 2) The baghouses shall be considered to be operating within the applicable parametric range when the monitoring device required by permit condition 20.F.1) measures a pressure differential within the range specified in the Operations and Maintenance (O&M) Plans most recently approved in writing by the Control Officer.

[County Rule 210§302.1c]

3) Measurement of a pressure differential outside of the applicable parametric range prescribed by the O&M Plan most recently approved in writing by the Control Officer shall require the Permittee to investigate and take corrective action if necessary to bring the control device into proper operation.

[County Rule 210§302.1c]

4) The Permittee shall record the period of measurement of a pressure differential outside of the applicable parametric range prescribed by the O&M Plan, the evaluation of the cause of the measurement, and corrective actions taken or a finding that the pressure differential returned to the applicable parametric range without action by the Permittee. Operation outside of the applicable parametric range that is due to a process or control device malfunction shall be recorded as such.

[County Rule 210§302.1c]

5) If the frequency of measurement of a pressure differential outside the applicable pressure differential range prescribed by the baghouse O&M plan or other information indicate that the baghouse is not being operated in a manner consistent with good air pollution practices, the Control Officer may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 210§302.1c]

- 6) The Control Officer may require the CAP contain one more of the following elements:
  - a) Improved preventive maintenance practices.
  - b) Improved baghouse operating practices
  - c) Process operation changes
  - d) Other actions appropriate to improve baghouse performance.
  - e) Schedule for CAP implementation and periodic reporting on the progress of CAP implementation.

[County Rule 210§302.1c]

7) If the Permittee or the Control Officer determines that the pressure drop parameters for the baghouse as specified in the O&M Plan are not representative of the normal and proper operation of the baghouse, the Permittee shall submit an amendment to the O&M Plan to address the necessary revision within 30 days of such determination. Such amendment shall be sent to the Department, to the attention of Manager, Technical Services Group.

[County Rule 210§302.1c]

- F. Requirements for Fugitive Dust Sources (Unpaved haul/access road, Open Area or Disturbed Surface Area)
  - 1) Stabilization Requirements
    - a) Unpaved Haul/Access Road
      - (1) The Permittee shall not allow visible dust emissions from the unpaved Haul/Access Road to exceed 20% opacity and either;
        - (a) shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup>; or
        - (b) shall not allow the silt content to exceed 6%
      - (2) The Permittee shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with subsection 302.2(b) of County Rule 310 and this permit condition, the Permittee must include, in their Dust Control Plan, the number of vehicles traveled on the unpaved haul/access road (i.e. number of employee vehicles, earthmoving equipment, haul trucks and water trucks)

[County Rule 310§302.2][County SIP Rule 310§302.2]

b) Open Area And Vacant Lot or Disturbed Surface Area

The Permittee of an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall meet at least 1 of the standards described in subsection 19.F.b)(1) through subsection 19.F.b)(7) below, as applicable (also 302.3(a) through subsection 302.3(g) of County Rule 310). The Permittee of such inactive disturbed surface area shall be considered in violation of this rule if such inactive disturbed surface area is not maintained in a manner that meets at least 1 of the standards described in subsection 19.F.b)(1) through subsection 19.F.b)(7) below, as applicable (also 302.3(a) through subsection 302.3(g) of County Rule 310).

- (1) Maintain a visible crust; or
- (2) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher; or
- (3) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or

- (4) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
- (5) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (6) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- (7) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator of the Environmental Protection Agency (EPA).

  [County Rule 310§302.3][County SIP Rule 310 §302.3]
- 2) Control Measures: The Permittee shall implement control measures before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. See subsection 304.3, Table 1 and Table 2 of County Rule 310. Table 1 and 2 of this Permit follows this permit condition. These Tables only include those activities from Table 1 and 2 of County Rule 310 for the current routine dust generating operations at the facility. For purposes of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310§301 and §302 (Conditions 18.D. and 19.F.1 of this permit), as determined by the corresponding test method(s), as applicable, and must meet other standard(s) set forth in County Rule 310 and this permit. Failure to comply with the provision of County Rule 308 (Work Practices) and Condition 19.F.4) of ths permit, as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.

[County Rule 310\s306][County SIP Rule 310\s306]

#### **TABLE 1**

#### SOURCE TYPE AND CONTROL MEASURES

#### **Vehicle Use In Open Areas And Vacant Lots:**

- 1A Restrict trespass by installing signs.
- 2A Install physical barriers such as curbs, fences, gates, posts, signs, shrubs, and/or trees to prevent access to the area.

**Unpaved Haul/Access Roads:** (The control measures listed below (1C-5C) are required work practices, per subsection 308.4 of County Rule 310.)

- 1C Limit vehicle speed to 15 miles per hour or less and limit vehicular trips to no more than 20 per day.
- 2C Apply water, so that the surface is visibly moist and subsection 302.2 of County Rule 310 is met.
- 3C Pave.
- 4C Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.2 of County Rule 310.
- 5C Apply a suitable dust suppressant, in compliance with subsection 302.2 of County Rule 310.

#### **Open Areas And Vacant Lots:**

- 1E Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.
- Pave, apply gravel, or apply a suitable dust suppressant, in compliance with subsection 302.3 of County Rule 310.
- 3E Establish vegetative ground cover in sufficient quantity, in compliance with subsection 302.3 of County Rule 310.

### Control measures below are required work practices and/or methods designed to meet the work practices, per Section 308 (Work Practices) of County Rule 310

#### Cleanup Of Spillage, Carry Out, Erosion, And/Or Trackout:

- Operate a street sweeper or wet broom with sufficient water, if applicable, at the speed recommended by the manufacturer and at the frequency(ies) described in subsection 308.3 of County Rule 310; or
- 2H Manually sweep-up deposits.

#### Trackout:

- 1J Install a grizzly or wheel wash system at all access points.
- 2J At all access points, install a gravel pad at least 30 feet wide, 50 feet long, and 6 inches deep.
- Pave starting from the point of intersection with a paved public roadway and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

#### TABLE 2

Note: Control measures in [brackets] are to be applied only to sources outside the nonattainment area.

#### SOURCE TYPE AND WIND EVENT CONTROL MEASURES

#### **Dust Generating Operations:**

- 1A Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
- Apply water or other suitable dust suppressant twice [once] per hour, in compliance with Section 301 of County Rule 310; or
- Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91(1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
- 4A Construct fences or 3 foot 5 foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas that reduce the amount of wind-blown material leaving a site. If implementing 4A, must also implement 2A or 3A above.

3) Should any primary control measure(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure, which may obviate the requirement of submitting a revised Dust Control Plan. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310§§303, 303.2, 303.3(b) and 303.4(a)] [County SIP Rule 310§§303, 303.2, 303.3(b) and 303.4(a)]

- 4) Work Practices: The Permittee shall comply with the following work practices.
  - a) Unpaved Haul/Access Roads: Implement 1 or more control measure(s) in Table 1(Unpaved Haul Access Roads-1C through 5C) of County Rule 310 and this permit, before engaging in the use of or in the maintenance of unpaved haul/access roads. These control measures are as follows:
    - (1) Limit vehicle speed to 15 miles per hour or less and limit vehicular trips to no more than 20 per day.
    - (2) Apply water, so that the surface is visibly moist and subsection 302.2 of County Rule 310 and 19.F.1)a) of these permit conditions is met.
    - (3) Pave
    - (4) Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with subsection 302.2 of County Rule 310 and 19.F.1)a) of these permit conditions.
    - (5) Apply a suitable dust suppressant, in compliance with subsection 302.2 of County Rule 310 and 19.F.1)a) of these permit conditions.

[County Rule 310§308.4]

[County SIP Rule 310§308.4][County SIP Rule 31§6(a)]

- b) Spillage, Carry-out, Erosion, And/Or Trackout
  - (1) Install and maintain a suitable trackout control device(Examples of trackout control devices are described in Table 1 (Trackout-1J, 2J, 3J) of County Rule 310 and this permit that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto a paved public roadway from the disturbed surface area larger than five acres.

Examples of trackout control devices from Table 1 of County Rule 310 and this permit are as follows:

- (a) Install a grizzly or wheel wash system at all access points.
- (b) At all access points, install a gravel pad at least 30 feet wide, 50 feet long, and 6 inches deep.
- (c) Pave starting from the point of intersection with a paved public roadway and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

[County Rule 310§308.3a.][County SIP Rule 310§308.3a.]

- (2) Cleanup spillage, carry-out, erosion, and/or trackout on the following time schedule:
  - (a) Immediately when spillage, carry-out, and/or trackout extends a cumulative distance of 50 linear feet or more or
  - (b) At the end of the work day, when spillage, carry-out, erosion, and/or trackout are other than the spillage, carry-out, erosion, and/or trackout described directly above and in subsection 308.3(b)(1) of County Rule 310.

[County Rule 310§308.3b.][County SIP Rule 310§308.3b.]

- 5) The Permittee shall obtain a revision to his permit before allowing or engaging in the following on a routine basis:
  - a) Unpaved parking lots;
  - b) Bulk material transport, hauling, handling and open storage piles;
  - c) Placement of bulk material onto paved surfaces; and
  - d) Weed Abatement by Discing or Blading
  - e) Earthmoving operations on disturbed surface areas one acre or greater. (Earthmoving activities associated with construction may be conducted after a separate earthmoving permit is obtained from the Control Officer)

[County Rule 210§302.1b(1)]

### G. Plate Finishing Machine

The Timesaver Grindmaster Plate Finishing Machine GR-3100-1350-WRT (ID# GM1) shall be conducted with exhaust vented, without bypass through the Thorne Model W 185/11 Wet Scrubber (ID# Wet Scrubber 1).

[County Rule 311§305][SIP Rule 311§305]

### H. Wet Scrubber Requirements

1) The wet scrubber shall be operated and maintained in accordance with the requirements of the Operation and Maintenance Plan (O&M) most recently approved in writing by the Control Officer.

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

2) The wet scrubber shall be considered to be operating within the applicable parametric range when the monitoring device required by permit condition 20.H.) measures a water level within the range specified in the approved Operations and Maintenance (O&M) Plan most recently approved in writing by the Control Officer.

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

3) Measurement of a water level outside of the applicable parametric range prescribed by the O&M Plan most recently approved in writing by the Control Officer shall require the Permittee to investigate and take corrective action if necessary to bring the control device into proper operation.

[County Rule 311\\$306][SIP Rule 311\\$306] [County Rule 210\\$302.1c]

4) The Permittee shall record the period of measurement of a water level outside of the applicable parametric range prescribed by the O&M Plan, the evaluation of the cause of the measurement, and corrective actions taken or a finding that the water level returned to the applicable parametric range without action by the Permittee. Operation outside of the applicable parametric range that is due to a process or control device malfunction shall be recorded as such.

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

5) If the frequency of measurement of a water level outside the applicable water level range prescribed by the wet scrubber O&M plan or other information indicate that the wet scrubber is not being operated in a manner consistent with good air pollution practices, the Control Officer may require the Permittee to submit a Corrective Action Plan (CAP).

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

- 6) The Control Officer may require the CAP contain one more of the following elements:
  - a) Improved preventive maintenance practices.
  - b) Improved wet scrubber operating practices
  - c) Process operation changes
  - d) Other actions appropriate to improve wet scrubber performance.
  - e) Schedule for CAP implementation and periodic reporting on the progress of CAP implementation.

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

7) If the Permittee or the Control Officer determines that the water level parameters for the wet scrubber as specified in the O&M Plan are not representative of the normal and proper operation of the wet scrubber, the Permittee shall submit an amendment to the O&M Plan to address the necessary changes within 30 days of such determination. Such amendment shall be sent to the Department, to the attention of Manager, Technical Services Group.

[County Rule 311§306][SIP Rule 311§306] [County Rule 210§302.1c]

### 20. MONITORING/RECORDKEEPING REQUIREMENTS:

### A. Facility wide Requirements

### 1) VOCs and HAPs

- The Permittee shall calculate a 12 month rolling emissions total for VOC, Dimethyl Formamide (DMF), Methyl Ethyl Ketone (MEK), Methanol, and HAPs total. The 12 month rolling emissions total shall be calculated by summing the emissions for the most recent 12 calendar months. The 12 month rolling total shall be calculated according to the following schedule:
  - (1) If the 12 month rolling total for VOCs is less than 88 tons per year, the Permit shall calculate monthly a monthly and 12 month rolling emissions total for VOC, DMF, MEK, Methanol and HAPs total. These calculations shall be made no later than the end of the following month.
  - (2) If the 12 month rolling total reaches 88 tons or greater, the Permittee shall complete the monthly calculation of the monthly and 12 month rolling total for VOC, DMF, MEK, Methanol, and HAPs total by the 10<sup>th</sup> of the following month. Monthly emissions calculations under this scenario shall be calculated on a daily basis and shall be performed by the end of the following day.
- b) The Permittee shall calculate the daily emissions of VOC, DMF, MEK, Methanol, and HAPs total. The daily emissions shall be calculated daily in advance before using any VOC or HAP containing materials. As part of the daily record, the Permittee shall keep records of the amount of each resin used per day, solvent content, amount of viscosity solvent used per day, amount of cleaning solvent used per day (IPA and parts washer solvent), ft²/day of each different product produced, and ft²/day of total product pressed.
- c) The Permittee shall use a VOC and HAP destruction efficiency of not higher than 97% for the thermal oxidizers in calculating emissions. The capture efficiency is assumed to be 100% for Treaters 1-3 due to a total enclosure around these equipment. The Permittee shall maintain an MSDS sheet of the VOC and HAP content of all VOC containing materials. The Permittee shall maintain documentation of the VOC and HAP content of the digested resins that are used in the Treaters. The Permittee shall maintain records of the batch recipe which lists the amount of resin required for each different product and the unique constituents, with their concentration, that are combined to make the resin.

[County Rule 210 \$302.1.c.(2)]

### 2) Opacity

a) The Permittee shall weekly conduct a facility walk-through and observe visible emissions from Edge Trimmer #1, Edge Trimmer #2, Edge Trimmer #3, Sheeters 2 –3, Boilers 1–3, Thermal Oxidizers 1-3, Central Vacuum #1, Dicy Tanks 1-2, and the Plate Finishing Machine. The Permittee shall log the visual observations, including the date and time when that reading was taken, whether or not visible emissions were present, name of the person who took the reading and any other related information.

[County Rules 300][County Rule 210 \$302.1(c)(1)][SIP Rule 30]

If visible emissions are observed from any source capable of emitting any air contaminant to the ambient air, other than uncombined water, the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. If the Permittee has not received a compliance status notification or notice of violation of an opacity standard in the 12 months preceding the visual observation, the initial Method 9 reading shall be taken within 3 days of the visual observance. Follow-up Method 9 readings by a certified VE reader shall be taken daily for the emitting equipment thereafter for the next 13 days that the emitting equipment is operated. The Method 9 readings shall be taken with the emitting equipment in operation. After the daily Method 9 readings for 14 days of operation have been obtained, the Permittee shall perform weekly Method 9 readings during each week that the emitting equipment is in operation. The requirement to obtain Method 9 readings shall no longer apply if there are no visible emissions during the operation of the equipment that previously produced the visible emission.

If the Permittee has received a compliance status notification or notice of violation of an opacity standard in the 12 months preceding the visual observation, the initial Method 9 reading shall be taken within 1 day of the visual observance.

If no operation of the emitting equipment occurs on the day that the initial Method 9 reading is required to be taken, then the initial certified Method 9 reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 reading is required, and no emissions are visible with the previously emitting equipment in operation, the Permittee shall not be required to conduct the Method 9 readings.

The Permittee shall log all visual observations and readings including the following:

- 1) The date and time that a visible observation or Method 9 reading was taken;
- 2) The name of the person who made the observation or reading;
- 3) Whether or not visible emissions were present;
- 4) The opacity of visual emissions determined by a Method 9 reading, if applicable;
- 5) A description of any corrective actions taken, including date, if applicable; and
- 6) Any other related information.

[County Rule 210 §302.1(c)(1)] [SIP Rule 31]

### b) Opacity Readings

1) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9

[40 CFR 60.11.b] [County Rule 300§501]

2) Opacity of visible emissions from intermittent sources as defined by County Rule 300\$201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300\\$502] [locally enforceable only]

### 3) Odor Log

The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 \$302.1.c.(2)] [locally enforceable only]

### B. NSPS Subpart VVV Monitoring and Recordkeeping Requirements

1) The Permittee shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the combustion temperature of the Thermal Oxidizer. The monitoring device shall have an accuracy within +/-1 percent of the temperature being measured in Celsius degrees.

[40 CFR §60.744 (e)][County Rule 360§301.73]

2) The Permittee shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the differential pressure across the natural draft openings.

[40 CFR §60.744 (h)][County Rule 360§301.73]

The Permittee shall record time periods of mixing or coating operations when the thermal oxidizer is malfunctioning or not in use.

[40 CFR §60.744 (i )][County Rule 360§301.73]

4) The Permittee shall record time periods of mixing or coating operations when the temperature monitor is malfunctioning or not in use.

[40 CFR §60.744 (j)] [County Rule 360§301.73]

5) The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of any affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative

[40 CFR §60.7 (b)] [County Rule 360§301.73]

### C. Thermal Oxidizer and Rule 336 Monitoring and Recordkeeping Requirements

1) The Permittee shall maintain a current list of coatings, adhesives, reducers, thinners, gun-cleaning materials, additives, and any other VOC-containing materials regulated by County Rule 336; give the VOC content of material for each as received (before thinning). A complete, neat assemblage of this data meets the requirements for a list. Express VOC content in 1 of 3 forms: pounds VOC per gallon, grams VOC per liter, or the percent VOC by weight along with the specific gravity or density,(2 numbers are required).

[County Rule 336 §501.1a] [SIP Rule 336 §501.1a]

- 2) Coatings: For all coatings (except those recorded under the subsection 305.4c of County Rule 336 low usage allowance), the Permittee shall make the following listings for coatings and adhesives that have VOC limits in Table 1 of County Rule 336:
  - a) VOC Before Reducing: The VOC content of each coating as received, minus exempt compounds. (This figure is sometimes called the "EPA Method 24" VOC content on manufacturer's data sheets). If the coating is a multi-part coating, list the VOC content which the manufacturer states the coating will have once the Permittee has mixed all the necessary parts together in the proportions specified by the manufacturer.
  - b) List Maximum VOC Content Of Coating As Applied: For each coating that the Permittee may thin/reduce or add any additive to, the Permittee shall record in a permanent log either of the following:
    - (1) The maximum number of fluid ounces thinner/reducer that the Permittee ever adds to a gallon of unreduced coating (or maximum g/liter), and the maximum fluid ounces of every other additive the Permittee mixes into a gallon of the coating; or

- (2) The VOC content of the coating, after adding the maximum amount of thinner/reducer and other additives that the Permittee would ever add, as determined by the formula in subsection 255.1 of County Rule 336.

  [County Rule 336§501.1c(1)][SIP Rule 336§501.1c(1)]
- 2) The Permittee shall Daily update his records, showing the type and amount used of each VOC-containing coating or adhesive which is regulated by name or type in Table 1 of County Rule 336, including coating exempted by subsection 305.4c of County Rule 336. The Permittee shall Monthly update each VOC-containing material, related to surface coating, that is not addressed by Table 1 of County Rule 336. This includes, but is not limited to, thinners, surfacers, and diluents.

[County Rule 336§501.2] [SIP Rule 336§501.2]

4) For purposes of recording usage, coatings and adhesives that are in the same category in Table 1 of County Rule 336, and have similar VOC content, may be recorded under a name that includes the category name. The highest VOC content among the members of that grouping shall be assigned to that grouping, rounded to the nearest 10th of a pound. To identify what products belong within each group, after each group name and the group's VOC content of material must appear the name of each product in the group and its VOC content of material. For example: For flexible plastic parts, you use 20 gallons of primer that has 3.04 lb VOC/gal., 30 gallons of primer having 3.14 lb VOC/gal., and 40 gallons of primer having 2.89 lb VOC/gal. You may record usage as 90 gallons of flexible plastic primer containing 3.1 lb VOC/gal. If grams VOC per liter is used to record VOC content, round off to the nearest whole number of grams.

[County Rule 336§501.3] [SIP Rule 336§501.3]

- 5) On each day the Thermal Oxidizer is used at a facility pursuant to County Rule 336, the Permittee shall:
  - a) Record the amount and VOC content of coating, the amount of catalyst/hardener, and the amounts of solvent, reducer, and diluent used that were subject to Thermal Oxidizer control pursuant to Rule 336; and
  - b) Maintain continuous permanent records of the O&M Plans key system operating parameters.
  - c) Make a permanent record of the maintenance actions taken, within 24 hours of the action's completion, for each day or period in which the O&M Plan requires that maintenance be done.

[County Rule 336§502.1] [SIP Rule 336§502.1]

6) The Permittee shall keep records of the dates of inspection, dates of service or maintenance and related activities. Records of time, date and cause of all control device failure and downtime shall also be maintained.

[County Rule 210§302.1b(4)][condition of Significant Permit Revision S96-029]

7) An explanation shall be entered for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.

[County Rule 336§502.2][SIP Rule 336§502.2]

8) The Permittee shall provide, properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is functioning properly and is properly maintained. Records shall kept pursuant to County Rule 336 Section 502 which demonstrate that the ECS meets the overall control standard required by County Rule 336 subsection 306.1.

[County Rule 336§306.3][SIP Rule 336§306.3]

D. <u>Monitoring requirements for Treater 2 Compliance with VOC, HAP, TSP and PM<sub>10</sub> allowable emissions</u>

[County Rule 210 \$302.1.c.(2)]

### 1) VOCs and HAPs

- a) The Permittee shall calculate a 12 month rolling emissions total for VOC, DMF, MEK, Methanol, HAPs total, TSP, and PM<sub>10</sub>. The 12 month rolling emissions total shall be calculated by summing the emissions for the most recent 12 calendar months. The 12 month rolling total shall be calculated according to the following schedule:
  - (1) If the 12 month rolling total for VOCs is less than 26 tons per year, the Permit shall calculate monthly a monthly and 12 month rolling emissions total for VOC, DMF, MEK, Methanol, and HAPs total. These calculations shall be made no later than the end of the following month.
  - (2) If the 12 month rolling total reaches 26 tons or greater, the Permittee shall complete the monthly calculation of the monthly and 12 month rolling total for VOC, DMF, MEK, Methanol, and HAPs total by the 10<sup>th</sup> of the following month. Monthly emissions calculations under this scenario shall be calculated on a daily basis and shall be performed by the end of the following day.
- b) The Permittee shall calculate the daily emissions of VOC, DMF, MEK, Methanol, and HAPs total. The daily emissions shall be calculated daily in advance before using any VOC or HAP containing materials. As part of the daily record, the Permittee shall keep records of the amount of each resin used per day, solvent content, amount of viscosity solvent used per day, and ft²/day of each different product produced.
- c) The Permittee shall use a VOC and HAP destruction efficiency of not higher than 97% for the thermal oxidizers, including Thermal Oxidizer 2, in calculating emissions. The capture efficiency is assumed to be 100% for Treaters 1-3 due to a total enclosure around these equipment. The Permittee shall maintain an MSDS sheet of the VOC and HAP content of all VOC containing materials. The Permittee shall maintain documentation of the VOC and HAP content of the digested resins that are used in Treater 2. The Permittee shall maintain records of the batch recipe which lists the amount of resin required for each different product

and the unique constituents, with their concentration, that are combined to make the resin.

### 2) TSP and $PM_{10}$

- a) The Permittee shall calculate monthly, a monthly, daily, and 12 month rolling emissions total for TSP and PM<sub>10</sub>. The 12 month rolling emissions total shall be calculated by summing the emissions for the most recent 12 calendar months. These calculations shall be made no later than the end of the following month.
- b) The Permittee shall calculate the daily emissions of TSP and PM<sub>10</sub> on a monthly basis by dividing the monthly emissions by the number of workdays Treater 2 is operation that month.

### E. Monitoring/Recordkeeping applicable to Solvent Cleaning Activities

- The Permittee shall maintain a current list of cleaning-solvents; state the VOCcontent of each in pounds VOC per gallon of material or grams per liter of material.
- 2) If the Permittee uses any cleaning-solvent subject to the vapor-pressure limits of County Rule 331 §304.1 and Condition 19.C.2.c) of this permit shall have on site the written value of the total VOC vapor-pressure of each such solvent in one of the following forms:
  - a) A manufacturer's technical data sheet,
  - b) A manufacturer's safety data sheet (MSDS), or
  - c) Actual test results.
- 3) The Permittee shall record the amount of cleaning-solvent used at the end of each month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent.
- 4) Annually the Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.
- 5) Annually the Permittee may, for purposes of recording usage, give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all products in that group are then recorded under just one name. (In such case the Permittee shall also keep a separate list that identifies the product names of the particular solvents included under the group name.) To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10<sup>th</sup> of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

[County Rule 331 §501] [SIP Rule 331 §501]

F. <u>Monitoring/Recordkeeping applicable to Baghouses</u>

[County Rule 210 §302.1c, County Rule 311 §501, SIP Rule 311 §501]

- 1) The Permittee shall properly install, maintain and operate a monitoring device to measure the pressure drop across the baghouses. The Permittee shall record the pressure drop for each day that the baghouse is in operation. If the baghouse was not in operation, the log shall record that fact.
- 2) The Permittee shall maintain on site manufacturer's information stating the removal efficiency of the baghouse filters.
- G. <u>Monitoring/Recordkeeping applicable to the Fugitive Dust Sources(Unpaved haul/access road, Open field for temporary equipment/scrap material storage, Open Area, Trackout)</u>
  - 1) The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310§502][County SIP Rule 310§502]

2) Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310§503][County SIP Rule 310§503]

- 3) The following test methods shall be used as appropriate.
  - a) Opacity observations
    - (1) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations) of the County Rules, except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.

[County Rule 310 §501.1(a), Appendix C Section 3] [County SIP Rule 310 §501.1(a), Appendix C Section 3]

(2) Unpaved Haul/Access Road: Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots) of the County Rules.

[County Rule 310 §501.1(c), Appendix C Section 2.1] [County SIP Rule 310 §501.1(c), Appendix C Section 2.1]

### b) Stabilization Observations

(1) Unpaved Haul/Access Road: Stabilization observations for unpaved haul/access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots) of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in County Rule 310, determined by any of the applicable test methods constitutes a violation of the County Rules.

[County Rule 310 §501.2(b), Appendix C Section 2.1] [County SIP Rule 310 §501.2(b), Appendix C Section 2.1]

- (2) Open Area and Vacant Lot or Disturbed Surface Area: Stabilization observations for an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described below, as applicable. The owner and/or operator of such inactive disturbed surface area shall be considered in violation of County Rule 310 if such inactive disturbed surface area is not maintained in a manner that meets at least 1 of the standards described in subsection 302.3 of County Rule 310, as applicable.
  - (a) Appendix C, Section 2.3 (Test Methods For Stabilization-Visible Crust Determination) (The Drop Ball/Steel Ball Test) of the County Rules for a visible crust; or
  - (b) Appendix C, Section 2.4 (Test Methods For Stabilization-Determination Of Threshold Friction Velocity (TFV)) (Sieving Field Procedure) of the County Rules for threshold friction velocity (TFV) corrected for nonerodible elements of 100 cm/second or higher; or
  - (c) Appendix C, Section 2.5 (Test Methods For Stabilization-Determination Of Flat Vegetative Cover) of the County Rules for flat vegetation cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or
  - (d) Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the

County Rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or

- (e) Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the County Rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
- (f) Appendix C, Section 2.7 (Test Methods For Stabilization-Rock Test Method) of the County Rules for a percent cover that is equal to or greater than 10%, for non-erodible elements; or
- (g) An alternative test method approved in writing by the Control Officer and the Administrator of the EPA.

### H. Monitoring /Recordkeeping applicable to Wet Scrubber

[County Rule 210 §302.1c, County Rule 311 §501, SIP Rule 311 §501]

The Permittee shall properly install, maintain and operate a monitoring device to measure the water level in the wet scrubber. The Permittee shall record the water level on each day that the wet scrubber is in operation. If the wet scrubber was not in operation, the log shall record that fact.

### 21. REPORTING REQUIREMENTS

The Permittee shall file semiannual monitoring reports with the Control Officer, Attn: Large Source Compliance Supervisor. The initial reporting period shall begin on the permit issuance date and shall cover a period of 6 months or less. The second and subsequent reporting periods shall be in 6 month intervals after the end of the initial reporting period. The semiannual monitoring reports shall be filed by the end of the month following the reporting period. Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken. The monitoring report shall also contain the following information at a minimum:

[County Rule 210 §302.1 e (1)]

### A. Facility-Wide Requirements

### 1) Emissions Calculations

The Permittee shall include the results of the monthly and the rolling 12-month VOC, HAPs total, DMF, MEK, and Methanol emissions calculations for each month in the six-months reporting period. The Permittee shall also include any exceedances of the daily emission limits during the six-months reporting period.

### 2) Visible Emissions

- a) Dates on which visible emissions observations were taken;
- b) Name of the observer;
- c) Whether or not visible emissions were present:
- d) The opacity of visual emissions determined by a Method 9 reading, if applicable;
- e) A description of any corrective actions taken, including date taken, if applicable; and
- f) Any other related information.

[County Rules 210§302.1][ SIP Rule 30]

### 3) Odor Log

The Permittee shall include a copy of the portion of the odor log which covers the applicable 6 month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

[County Rule 210 §302.1.e.(1)] [locally enforceable only]

### B. Reporting Requirements for Treaters

- 1) The owner/operator shall maintain records and submit quarterly reports to the Control Officer, Attn: Large Source Compliance Supervisor documenting the following:
  - a) All 3-hour periods (during actual coating operations) during which the average combustion temperature of the device is more than 28 Celsius degrees below the average combustion temperature of the device during the most recent performance test that demonstrated compliance.

[40 CFR 60.747 d(4)] [County Rule 360§301.73]

b) The Permittee monitoring a total enclosure pursuant to 60.744(h), shall submit a report of all 3-hour periods (during actual coating operations) during which the average total enclosure monitor readings vary by 5% or more from the average value measured during the most recent performance test that demonstrated compliance.

[40 CFR 60.747 d(6)] [County Rule 360§301.73]

c) The Permittee not required to submit reports under 1) a) and b) above and §60.747 (d) (4) and (d) (6) due to no reportable periods occurring shall submit semiannual statements clarifying this fact.

[40 CFR 60.747 d(7)] [County Rule 360§301.73]

d) Submit reports with the report above of all periods during actual mixing or coating operations when the thermal oxidizer was malfunctioning or not operating.

[40 CFR 60.747 f(2)] [County Rule 360§301.73]

e) Submit reports with the report above of all periods during actual mixing or coating operations when a required monitoring device was malfunctioning or not operating.

[40 CFR 60.747 f(1)] [County Rule 360§301.73]

2) Quarterly reports shall be postmarked within 30 days of the end of the reporting period.

### C. Additional Reporting Requirements for Treater 2

The Permittee shall include the results of the monthly and the rolling 12-month VOC, HAPs, DMF, MEK, Methanol, TSP, and  $PM_{10}$  emissions calculations for each month in the six-months reporting period applicable to the Treater 2 controlled by Thermal Oxidizer 2. The Permittee shall also include any exceedances of the daily emission limits during the six-months reporting period.

[County Rule 210 302.1.e.(1)]

- D. Reporting Requirements applicable to the parts washer and wipe cleaning activities
  - 1) certification that the operational requirements applicable to the Parts Washer, continue to be in compliance;
  - 2) a summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material;
  - 3) the quantity of each cleaning solvent used during the reporting period:
  - 4) certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above;
  - 5) any new or updated material safety data sheets (MSDS) that may have been obtained during the period; and
  - 6) a summary of any testing that may have been performed during the period.

[County Rule 210 302.1.e.(1)]

E. Reporting Requirements applicable to Fugitive Dust Sources.

Any deviation from the approved dust control plan, reason for that deviation and any corrective actions taken.

[County Rule 310 §302.1e(1)]

#### 22. **TESTING REQUIREMENTS**

- Performance Tests for Thermal Oxidizers A.
  - 1) The Permittee shall conduct performance testing on Thermal Oxidizers 1, 2, and 3. [County Rule 200 §309]
  - 2) The Permittee shall use EPA test methods 25A, 7E, and 10 to demonstrate the VOC destruction efficiency, NOx emission rate, and CO emission rate of Thermal Oxidizer # 1, Thermal Oxidizer # 2, and Thermal Oxidizer # 3. [County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]
  - The testing shall be conducted any time between the 2<sup>nd</sup> and 3<sup>rd</sup> year after the 3) issuance of this permit.

[County Rule 270 §401] [SIP Rule 27A]

4) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary too determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[County Rule 270 §403]

5) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the emissions test.

[County Rule 270 §301.1] [County Rule 280 §301.5]

6) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Division may have a representative attend.

[County Rule 270 §404]

7) The Permittee shall complete and submit a report to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[County Rule 270 §§301.1 & 401]

### B. <u>Performance Tests for Wet Scrubber</u>

1) The Permittee shall conduct performance testing on the wet scrubber.

[County Rule 200 §309]

2) The Permittee shall use EPA Method 5 or its subparts to demonstrate the particulate matter emission rate of the Plate Finishing Machine. Alternative testing methods may be approved by the Control Officer as provided for in County Rule 270 §301.4.

[County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

3) The testing shall be conducted within 60 days after this equipment has achieved the ability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial startup of this equipment. If the equipment has been tested within the last 12 months prior to this permit issuance date, no test will be required.

[County Rule 270§403]

4) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary too determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[County Rule 270 §403]

5) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the emissions test.

[County Rule 270 §301.1] [County Rule 280 §301.5]

6) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Division may have a representative attend.

[County Rule 270 §404]

7) The Permittee shall complete and submit a report to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[County Rule 270 §§301.1 & 401]

- 8) The Permittee shall provide, or cause to be provided, performance testing facilities as follows:
  - a) Sampling ports adequate for test methods applicable to such source.
  - b) Safe sampling platform(s).
  - c) Safe access to sampling platform(s).
  - d) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

### C. Performance Test for Torit & Day Dust Collector (ID # 49-PJD-8)

1) The Permittee shall conduct performance testing on the Torit & Day Dust Collector (ID # 49-PJD-8).

[County Rule 200 §309]

2) The Permittee shall use EPA Method 5 or its subparts to demonstrate the particulate matter removal efficiency of the baghouse. Alternative testing methods may be approved by the Control Officer as provided for in County Rule 270 §301.4.

[County Rule 270 §§301 & 402] [SIP Rule 25 A & D] [SIP Rule 27 B]

3) The testing shall be conducted within 180 days after the issuance of this permit.

[County Rule 270 §401] [SIP Rule 27A]

4) Performance tests shall be conducted under such conditions as the Control Officer shall specify based upon representative performance of the source or facility. The Permittee shall make available to the Control Officer such records as may be necessary too determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

[County Rule 270 §403]

5) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the emissions test.

[County Rule 270 §301.1] [County Rule 280 §301.5]

6) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Division may have a representative attend.

[County Rule 270 §404]

7) The Permittee shall complete and submit a report to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[County Rule 270 §§301.1 & 401]

- 8) The Permittee shall provide, or cause to be provided, performance testing facilities as follows:
  - a) Sampling ports adequate for test methods applicable to such source.
  - e) Safe sampling platform(s).
  - f) Safe access to sampling platform(s).
  - g) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

9) Should the results of the test show that the baghouse efficiency is not sufficient to meet the allowable PM emissions determined by the equation in County Rule 311 §301.1 and SIP Rule 311 §301.1, the Permittee shall test the rest of the baghouses or a combination of baghouses until the allowable PM emission limit is met.

Note: All test protocols, test notifications and test reports required by these permit conditions should be addressed to the attention of the Technical Services Manager.

### 23. OTHER

### A. Dust Control Plan Required

1) The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operations. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Table 1 of County Rule 310.

[County Rule 310  $\S 303, 303.2, 303.3(b)$  and 303.4(a)] [County SIP Rule 310  $\S 303, 303.2, 303.3(b)$  and 303.4(a)]

2) Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §§303.1 and 306] [County SIP Rule 310 §§303.1 and 306]

3) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305] [County SIP Rule 310 §305]

4) If any changes to a Dust Control Plan, associated with a Title V Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.

[County Rule 310 §402.2] [County SIP Rule 310 §402.2]

### B. Permit Shield

Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance included in the Appendix B "Permit Shield" of this permit.

C. MACT Standard for Printing, Coating, and Dyeing of Fabrics and Other Textiles

Isola Laminate Systems is subject to 40 CFR 63 Subpart OOOO-National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles. The facility must comply with Subpart OOOO by the date 3 years after May 29, 2003. The facility must submit their Initial Notification in accordance with 40 CFR §63.4310 no later than 1 year after May 29, 2003.

# Appendix A Equipment List Isola Laminate Systems V95016

Equipment ID	Name/Type	Installation Date	Modification Date	Control Device	Stack ID
				2.7.1	
ST1	9800 Gallon Bulk Resin Above Ground Storage Tank # 1	1982	1997	NA	NA
ST2	9800 Gallon Bulk Resin Above Ground	1982	1997	NA	NA
512	Storage Tank # 2	1962	1997	INA	INA
ST3	9800 Gallon Bulk Resin Above Ground	1982	1997	NA	NA
515	Storage Tank # 3	1902			1111
ST4	9800 Gallon Bulk Solvent Above Ground	1982	1997	NA	NA
	Storage Tank # 1				
ST5	9800 Gallon Bulk Solvent Above Ground	1982	1997	NA	NA
	Storage Tank # 2				
HWT	9800 Gallon Above Ground Hazardous	1982	1998	NA	NA
	Waste Tank				
CT1	750 Gallon Batch Compounding Tank # 1	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT2	750 Gallon Batch Compounding Tank # 2	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT3	300 Gallon Batch Compounding Tank # 3	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT4	300 Gallon Batch Compounding Tank # 4	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT5	1000 Gallon Batch Compounding Tank # 5	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT6	1000 Gallon Batch Compounding Tank # 6	1982	1997	Thermal	212
				Oxidizer 2 or 3	
CT7	300 Gallon Batch Compounding Tank # 7	1982	1997	Thermal	212
CITE O	200 G H D 1 G 1 T 1 H 0	1002	1005	Oxidizer 2 or 3	212
CT8	300 Gallon Batch Compounding Tank # 8	1982	1997	Thermal	212
CTO	1000 C 11 D + 1 C 1' T 1 # 0	1002	1007	Oxidizer 2 or 3	212
CT9	1000 Gallon Batch Compounding Tank # 9	1982	1997	Thermal	212
CT10	1000 Gallon Batch Compounding Tank # 10	1982	1997	Oxidizer 2 or 3 Thermal	212
C110	1000 Gallon Batch Compounding Tank # 10	1982	1997	Oxidizer 2 or 3	212
BT1	1000 gallon Blend Tank # 1	1982	1997	Thermal	212
БП	1000 ganon Biend Tank # 1	1962	1997	Oxidizer 2 or 3	212
BT2	750 gallon Blend Tank # 2	1982	1997	Thermal	212
DIZ	750 ganon biend Tank # 2	1702	1777	Oxidizer 2 or 3	212
DT1	300 gallon Dicy Tank #1	1982	1997	Torit 90-H55	414
<b>D</b> 11	Soo ganon Bieg Tank "1	1702		Dust Collector	111
DT2	300 gallon Dicy Tank #2	1982	1997	Torit 90-H55	414
				Dust Collector	
P1	4500 sqft/hr Press # 1	1982		NA	410
P2	3500 sqft/hr Press # 2	1993		NA	421
B1	6.28 MMBtu/hr Natural Gas Fired Boiler # 1	1982		NA	714
B2	6.28 MMBtu/hr Natural Gas Fired Boiler # 2	1982		NA	715
B3	6.28 MMBtu/hr Natural Gas Fired Boiler # 3	1993		NA	716
T1	Treater # 1	1984	1996	Thermal	210
		·	•		

				Oxidizer 1	
T2	Treater #2	1986	1996	Thermal	211
				Oxidizer 2	
T3	Treater #3	1993	1996	Thermal	212
				Oxidizer 3	
TET1	Edge Trimmer #1	1982		Torit TJ-460-	214
				155 Dust	
				Collector	
TET2	Edge Trimmer #2	1986		Torit & Day	215
				Dust Collector	
TET3	Edge Trimmer #3	1993		Torit & Day	215
				Dust Collector	
S2	Sheeter #2	1982	2002	Torit & Day	215
				Dust Collector	
S3	Sheeter #3	1982		Torit & Day	215
				Dust Collector	
CV1	Central Vacuum # 1	1982		Lamson Dust	225
				Collector	
PW	20 gallon Parts Washer non-vapor batch	1989		NA	PW
	cleaning machine with remote reservoir				
GM1	Plate Finishing Machine	2003		Wet Scrubber 1	GM1

### **CONTROL DEVICES**

Equipment ID	Name/Type	Installation Date	Stack ID	Capture efficiency	Permitted Destruction Efficiency	Tested Destruction Efficiency	Emission Unit Controlled
TO1	Thermal Oxidizer #1	1982, modified 1996	212	100%	97%	99.8	Treater 1
TO2	Thermal Oxidizer #2	1985 modified 1992	212	100%	97%	98.6	Treater 2, Compounding Room Tanks
TO3	Thermal Oxidizer #3	1993 replaced 2002	212	100%	97%	To be determined	Treater 3, Compounding Room Tanks
TJ-460-155	Torit Dust Collector	1982	214	100%	NA	NA	Edge Trimmer 1
49-PJD-8	Torit and Day Dust Collector	1993	215	100%	NA	NA	Edge Trimmers 2-3, Sheeters 2-3
Lamson	Lamson Corp. Dust Collector	1983	225	100%	NA	NA	Central Vacuum
90-H55	Torit Dust Collector	1982	414	100%	NA	NA	Dicy Tanks
Wet Scrubber 1	Thorne Model 185/11 self induced spray wet scrubber	2003	GM1	100%	NA	NA	Plate Finishing Machine

## Appendix B Permit Shield Isola Laminate Systems V95016

## Maricopa County Air Pollution Control Regulations

## Regulation I General Provisions

Rule 100	GENERAL PROVISIONS AND DEFINITIONS (11/6/02 revision)
100 §104	Circumvention
100 §105	Right of Inspection of Premises
100 §106	Right of Inspection of Records
100 §301	Air Pollution Prohibited
100 §502	Data Reporting
100 §503	Emissions Statements Required as Stated in the Act
100 §504	Retention of Records
100 §505	Annual Emissions Inventory Report

Rule 130	EMERGENCY PROVISIONS (7/26/00 revision)	
130 §400	Administrative Requirements	

Rule 140	EXCESS EMISSIONS (9/5/01 revision)	
140 §400	Administrative Requirements	
140 §500	Monitoring and Records	

## Regulation II Permits and Fees

Rule 200	PERMIT REQUIREMENTS (Revised 8/22/01)
200 \$301	Permits Required
200 \$306	Permit to Burn
200 \$308	Standards for Applications
200 \$310	Prohibition – Permit Modification
200 \$311	Permit Posting Required
200 \$403.2	Permit Renewal and Expiration
200 \$404.1	Permit Transfers.
200 \$407	Air Quality Impact Models
200 \$408	Testing Procedures

<b>Rule 210</b>	TITLE V PERMIT PROVISIONS 9 (05/07/03 revision)
210 §400	Administrative requirements
210 §401	Fees
210 §402	Permit Term
210 §403	Source Changes Allowed without Permit Revisions

210 §404	Administrative Permit Revisions
210 §405	Minor Permit Revisions
210 §406	Significant Permit Revisions
210 §407	Permit Shields

<b>Rule 270</b>	PERFORMANCE TESTS 11/15/93
270 §300	Standards
270 §400	Administrative Requirements
270§405	Testing Facilities Required

## Rule 280 FEES (5/21/03 revision )

## Regulation III Control of Air Contaminants

Rule 300	VISIBLE EMISSIONS (2/7/01 revision)
300 §301	Limitations-Opacity/General; Opacity ≤ 20%
300 §302	Exceptions
300 §501	Compliance Determination –
	Opacity
300 §502	Compliance Determination –
	Opacity of Visible Emissions
	From Intermittent Sources

Rule 310	FUGITIVE DUST SOURCES (2/16/00 revision)
310 §301	Opacity Limitation for Fugitive Dust Sources
310 §302.2	Stabilization Requirements for Unpaved Haul/Access Road
310 §302.3	Stabilization Requirements for Open Area and Vacant Lot or Disturbed Surface Area
310 §306	Control Measures
310 §308.4	Work Practices for Unpaved Haul/Access Roads
310 §308.3a	Work Practices for Spillage, Carry-out, Erosion and/Or Trackout
310 §308.3b	Work Practices for Spillage, Carry-out, Erosion and/Or Trackout
310 §502	Recordkeeping
310 §§303,	Dust Control Plan Required
303.2,	
303.3(b),	
and 303.4	
310 §503	Records Retention

Rule 311	PARTICULATE MATTER FROM PROCESS INDUSTRIES (7/02/03 revision)	
311§301.1	Limitations – Process Industries	
311 §302	Applicability of Emission Limits for Combined Emissions from Similar Operations	
311 §306	O&M Plan required	
311 §501	Monitoring and Records – Providing and Maintaining Monitoring Devices	

Rule 314	OPEN OUTDOOR FIRES (12/19/01 revision)
314§302	Burn Permit

<b>Rule 320</b>	ODORS AND GASEOUS AIR CONTAMINANTS (7/02/03 Revision)
320 §300	Standards
320 §302	Material Containment
	Required
320 §303	Stack Height

Rule 331	SOLVENT CLEANING (4/7/99 revision)	
331 §301	Solvent Handling Requirements	
331 §302.1	Equipment Requirements for All Cleaning Machines	
331 §302.2	Equipment Requirements for All Cleaning Machines	
331 §303.1	Operating Requirements	
331 §303.2	Signage Requirements	
331 §304.1	Solvent Specifications for Non-Vapor Cleaning and Degreasing	
331 §305.1	Non-Vapor Batch Cleaning Machines, With Remote Reservoir	
331 §501	Recordkeeping and Reporting	

Rule 336	SURFACE COATING OPERATIONS (4/7/99 revision)
336 §3012	Standards
336 §304.1	Handling and Disposal of VOC: Use and Storage
336 §304.2	Handling and Disposal of VOC: Disposal of VOC and VOC-Containing Material.
336 §306.2a	Operation and Maintenance Plan (O&M)
336 §306.2c	O&M Plan
336 §306.3	O&M Plan
336 §306.4	O&M Plan
336 §501.1a	Recordkeeping and Reporting
336 §501.2	Recordkeeping and Reporting
336 §501.3	Recordkeeping and Reporting
336 §502.1	ECS Recording Requirements
336 §502.2	ECS Recording Requirements

Rule 360	NEW SOURCE PERFORMANCE STANDARDS (3/7/01 revision)	
360 §301	Adopted Federal Standards	
360 §301.1	Subpart A – General Provisions	
360 §301.73	Subpart VVV – Standards of Performance for Polymeric Coating of Supporting	
	Substrates	

<b>Rule 370</b>	FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM (3/7/01 revision)
370 §301.8	Subpart M – National Emission Standard for Asbestos

## Regulation VI - Emergency Episodes

Rule 600	EMERGENCY EPISODES (7/13/88)	
600 §302	Control Actions	

## **Federal Requirements**

40 CFR 60 Subpart VVV	STANDARDS OF PERFORMANCE FOR POLYMERIC COATING OF SUPPORTING SUBSTRATES
§60.742 b(2)	Standards
§60.742 c(1)	Standards
§60.744 (e)	Monitoring
§60.744 (h)	Monitoring
§60.744 ( i )	Monitoring
§60.744 (j)	Reporting and Recordkeeping
§60.747 (d)(4)	Reporting and Recordkeeping
§60.747 d(6)	Reporting and Recordkeeping
§60.747 d(7)	Reporting and Recordkeeping
§60.747 f(2)	Reporting and Recordkeeping
§60.7b f(1)	General Provisions – Notification and Recordkeeping

40 CFR 60 Subpart A	GENERAL PROVISIONS
40CFR 60.12	Circumvention
40 CFR 60.7b f(1)	Notification and Recordkeeping

40 CFR 63 Subpart A	GENERAL PROVISIONS
40CFR 63.4(b)	Circumvention

40 CFR 60 Subpart 82	PROTECTION OF STRATOSPHERIC OZONE
§82.106-82.124	Labeling Requirements
§82.156	Required Practices
§82.158	Standards
§82.161	Certified Technician

40 CFR 68	CHEMICAL ACCIDENT PREVENTION PROVISIONS	
	Risk Management Plan	

40 CFR 61 Subpart M	NATIONAL EMISSION STANDARD FOR ASBESTOS		
§61.145 – 147	Comply with Applicable Requirements for all demolition and renovation		
	Projects		
§61.150	Comply with Applicable Requirements for all demolition and renovation		
	Projects		

Maricopa County State Implementation Plan (as of 12/31/99)

Regulation I General Provisions

## Rule 3 | AIR POLLUTION PROHIBITED

Regulation III – Control of Air Contaminants

## Rule 30 VISIBLE EMISSIONS

Rule 31	Emissions of Particulate Matter	
31§H	Fuel Burning	

Rule 32	ODORS AND GASEOUS EMISSIONS
32§A	Gaseous and Odorous Emissions
32§C	Material Containment Required
32§D	Stack Requirements

Rule 310	FUGITIVE DUST SOURCES		
310§ 301	Opacity Limitation for Fugitive Dust Sources		
310§302.2	Stabilization Requirements for Unpaved Haul/Access Road		
310§302.3	Stabilization Requirements for Open Area and Vacant Lot or Disturbed Surface Area		
310§306	Control Measures		
310§308.4	Work Practices for Unpaved Haul/Access Roads		
310§308.3a	Work Practices for Spillage, Carry-out, Erosion and/Or Trackout		
310§308.3b	Work Practices for Spillage, Carry-out, Erosion and/Or Trackout		
310§502	Recordkeeping		
310 §§303,	Dust Control Plan Required		
303.2,			
303.3(b),			
and 303.4			
310§503	Records Retention		

Rule 311	PARTICULATE MATTER FROM PROCESS INDUSTRIES	
311§301.1	Limitations – Process Industries	
311§302	Applicability of Emission Limits for Combined Emissions from Similar Operations	
311§306	O&M Plan required	
311§501	Monitoring and Records – Providing and Maintaining Monitoring Devices	
311§304.1	Limitations – Fuel Burning Equipment	

Rule 331	SOLVENT CLEANING
331§301	Solvent Handling Requirements
331§302.1	Equipment Requirements for All Cleaning Machines
331§302.2	Equipment Requirements for All Cleaning Machines
331§303.1	Operating Requirements
331§303.2	Signage Requirements
331§304.1	Solvent Specifications for Non-Vapor Cleaning and Degreasing
331§305.1	Non-Vapor Batch Cleaning Machines, With Remote Reservoir
331§501	Recordkeeping and Reporting

Rule 336	SURFACE COATING OPERATIONS
336§3012	Standards
336§304.1	Handling and Disposal of VOC: Use and Storage
336§304.2	Handling and Disposal of VOC: Disposal of VOC and VOC-Containing Material.
336§306.2a	Operation and Maintenance Plan (O&M)
336§306.2c	O&M Plan
336§306.3	O&M Plan
336§306.4	O&M Plan
336§501.1a	Recordkeeping and Reporting
336§501.2	Recordkeeping and Reporting
336§501.3	Recordkeeping and Reporting
336§502.1	ECS Recording Requirements
336§502.2	ECS Recording Requirements

### Technical Support Document (TSD) Isola Laminate Systems Permit Number V95-016

### I. COMPANY DESCRIPTION

Isola Laminate Systems located in Chandler, Arizona began operation in 1981 Isola Laminate Systems manufactures copper clad laminates and has SIC code 3679. The existing operating permit # is 8602974. A Title V application was submitted on 12/15/95. An updated Title V application was received on 5/30/02. A revised application was received 5/2/03.

Company Information

Facility Name: Isola Laminate Systems
Mailing Address: 165 South Price Road

Chandler, AZ 85224

Facility Address: Same

### II. APPLICABLE REQUIREMENTS

### A. Facility-Wide Emission Limits(**Permit Condition 18.A.1**))

Pollutant	Daily Emissions Limits	Twelve Month Rolling
		Emission Limits*
VOC	588 lbs/day	98 TPY
HAPs total	414 lbs/day	69 TPY
Dimethyl Formamide (DMF)	324 lbs/day	54 TPY
Methyl Ethyl Ketone (MEK)	54 lbs/day	9 TPY
Methanol	36 lbs/day	6 tpy

<sup>\*</sup>The rolling twelve month emissions shall be calculated by summing the total emissions over the most recent twelve calendar months.

[County Rule 210§302.1b]

### 1. Discussion

VOC and HAP emission limits

The VOC and HAP emission limits above are from the existing permit significant permit revision number S96-029 dated 2/13/97. The emission limits were established as a result of changes that were made to all three treaters. To avoid New Source Review (NSR) (County Rule 240), the facility took a facility wide VOC limit to stay below the 100 TPY major source threshold for NSR. These limits and the HAP limits will remain in place. Later on December 8, 1997, Maricopa County was downgraded to a "serious" non-attainment area for Ozone and NOx, which tightened the major source threshold for VOCs and NOx to 50 tons per year. This made Isola a major

source for NSR due to its VOC and NOx emissions and all future modifications from that point on should be evaluated for whether a major modification has occurred.

2. Monitoring for Compliance with Facility-wide VOC and HAP Emission Limitations.

The Permittee is required to monitor for compliance with the daily and 12 month rolling emission limits by calculating emissions daily in advance before using any VOC or HAP containing material and by monthly calculating and recording the monthly and 12 month rolling emissions total. Should the VOC emissions reach 88 tons or greater (roughly 90% of the standard), the facility will begin to calculate the monthly and 12 month rolling total on a daily basis. A total enclosure is installed around Treaters 1-3 in accordance with NSPS Subpart VVV. The total enclosure ensures that 100% of the VOCs and HAPs exhausted from the Treaters are captured and sent to the thermal oxidizers. The existing significant permit revision (S96-029) requires a 97% efficiency for the three thermal oxidizers for VOCs. This is the highest efficiency that can be used in the daily calculation. The most recent tests of the thermal oxidizers provided higher efficiencies than 97%. However, 97% must be used because the tested value cannot be assumed to represent the efficiency of the units at all times. It is assumed that all VOCs and HAPs used in Treaters 1-3 are exhausted to the Thermal Oxidizers. It is assumed that VOC emissions from the compounding room tanks are controlled by a thermal oxidizer that is at least 97% efficient. The facility reported facility wide VOC emissions of 5.5 tons in 2002, 4.4 tons in 2001, 13.3 tons in 2000, 6.6 tons in 1999, and 11.7 tons in 1998 which are well below the 98 tpy facility wide VOC limit. These are likely based on the tested efficiencies of the thermal oxidizers. If the numbers are adjusted for the required 97% efficiency, the numbers are calculated to be 12.7, 10.15, 30.7, 15.23, and 27 tons. The post control potential to emit of the facility is approximately 130 TPY. However, because the treaters do not run at their design capacities, VOC emissions are not expected to exceed the 98 TPY limit.

The following is an example of the calculation of the daily facility wide VOC emissions

 $(A1+A2+A3)(0.03) + (2.25E-4 lbs/ft^2 product pressed) x (ft^2 product pressed/day)) + VOC used for cleaning + 9 lbs/day = VOCs emitted at the facility.$ 

VOC or individual HAP usage in Treater 1, 2, or 3 is calculated according to the following equations:

$$A1 = \sum_{i=1}^{b} [(R1) (\%VOC \text{ or } HAP)_{R1} + (V1) (\%VOC \text{ or } HAP)_{V1}]$$

$$b$$

$$A2 = \sum_{i=1}^{b} [(R2) (\%VOC \text{ or } HAP)_{R2} + (V2) (\%VOC \text{ or } HAP)_{V2}]$$

b
$$A3 = \sum_{i=1}^{b} [(R3) (\%VOC \text{ or } HAP)_{R3} + (V3) (\%VOC \text{ or } HAP)_{V3}]$$

b= the number of different batches produced during the day (24 hour period)

R1, R2, R3 = Resin Usage in lbs in Treater 1, 2, or 3

V1,V2, V3 = Viscosity Solvent in lbs in Treater 1, Treater 2, or Treater 3 %VOC or HAP = the weight percent of VOC or individual HAP in the resin or viscosity solvent

### B. County Rule 300-Opacity Limits (Permit Condition 18.A.2))

### 1. Discussion

County Rule 300 restricts visible emissions from any source to 20% opacity other than emissions of uncombined water. County Rule 300 and the 20% opacity limitation of these permit conditions are locally enforceable only. SIP Rule 30 and the 40% opacity limitation of these permit conditions are federally enforceable.

2. Monitoring for Compliance with Opacity Limits
Because all dust generating equipment vented outdoors is required to pass
through an approved Emission Control System (**Permit Conditions 19.D.1-5**)
and **Permit Condition 19.G.**, visible emissions are not expected from the
facility. The Permittee will monitor for compliance with the opacity
requirements of this permit by performing a weekly walk around the outside of
the facility, looking for visible emissions from Edge Trimmer #1, Edge
Trimmer #2, Edge Trimmer #3, Sheeters 2 –3, Boilers 1 –3, Thermal Oxidizers 13, Central Vacuum #1, Dicy Tanks 1-2, and the Plate Finishing Machine. (**Permit Condition 20.A.2**) a)). An important part of this inspection should be the
baghouses and the wet scrubber. This requirement is intended to regulate the
opacity from sources that vent outdoors.

If emissions are observed, and the Permittee has not had an opacity violation in the 12 months preceding the observation, then the Permittee is required to obtain an EPA Method 9 reading by a certified reader within 3 days of the observation. Follow-up Method 9 readings by a certified VE reader shall be taken daily for the emitting equipment thereafter for the next 13 days that the emitting equipment is operated. The Method 9 readings shall be taken with the emitting equipment in operation. After the daily Method 9 readings for 14 days of operation have been obtained, the Permittee shall perform weekly Method 9 readings during each week that the emitting equipment is in operation. The requirement to obtain Method 9 readings shall no longer apply if there are no visible emissions during the operation of the equipment that previously produced the visible emissions.

If the Permittee has received a compliance status notification or notice of violation of an opacity standard in the 12 months preceding the visual

observation, the initial Method 9 reading shall be taken within 1 day of the visual observance.

If no operation of the emitting equipment occurs on the day the initial Method 9 reading is required to be taken, then the initial certified Method 9 reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 reading is required, and no emissions are visible with the previously emitting equipment in operation, the Permittee shall not be required to conduct the Method 9 reading.

A certified Method 9 reading of greater than 20% opacity at any time constitutes a violation of the opacity limitations of the Permit, regardless of whether visible emissions have persisted for three subsequent days.

### C. Particulate Matter – County Rule 311 (**Permit Condition 18.B and 18.E**)

### 1. Discussion

The facility is subject to County Rule 311, Particulate Matter from Process Industries, which imposes a cap on hourly emission of particulate matter based on the total process weight from all similar operations at the facility. The process weight rate is less than 60,000 pounds per hour of material; therefore the applicable requirement is County Rule 311 §301.1 with the following process weight rate equation:

 $E = 3.59P^{0.62}$ 

### Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

Also applicable are County Rule 311 §305 and 306, which allow the Permittee to comply with the particulate matter standard by operating an approved "emission control system" with an approved O&M Plan. The facility currently operates three Torit dust collectors and one Lamson dust collector that vent to the atmosphere. They are as follows:

Torit TJ-460-155 Dust Collector controls Edge Trimmer 1 Torit&Day 49-PJD Dust Collector controls Edge Trimmers 2-3 & Sheeters 2-3 Torit 90-H55 Dust Collector controls Dicy Tanks 1 and 2 Lamson Dust Collector controls Central Vacuum

The O&M Plans for these equipment were approved on February 6, 1997.

Also applicable to County Rule 311 is the new plate finishing machine installed under minor permit revision 1-31-03-01, which is under review. The new plate finishing machine is treated separately because it will be subject to its own emission limitation because it is not similar to the other existing dust generating operations controlled by the baghouse type dust collectors above. Stainless Steel press plates are used at the press stations. These plates must be

completely smooth and require periodic resurfacing, which is accomplished with the press plate finishing machine.  $PM_{10}$  emissions result from silica from the sanding belts and metal dusts from the plates. These  $PM_{10}$  emissions will be controlled by a Thorne Model W 185/11 self-induced spray Wet Scrubber (Equipment ID # Wet Scrubber 1). The hourly emissions of particulate matter allowed from the plate finishing machine will be based on the process weight of material introduced into the plate finishing machine. This unit does not process more than 60,000 pounds per hour of material. Therefore the applicable requirement is County Rule 311 §301.1 with the following process weight rate equation:

 $E = 3.59P^{0.62}$ 

### Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

Also applicable are County Rule 311 §305 and 306, which allow the Permittee to comply with the particulate matter standard by operating an approved "emission control system" with an approved O&M Plan. The facility will use one (1) Thorne W 185/11 Wet Scrubber to control particulate matter emissions from the plate finishing machine. The O&M Plan for this equipment was received on March 5, 2003. This plan was deficient. A revised O&M Plan dated May 7, 2003 was received May 8, 2003. This revised O&M Plan was approved May 13, 2003.

2. Monitoring for Compliance with Particulate Matter requirements Process Weight Rate equation

The Permittee has elected to comply with County Rule 311 through the operation of approved emission control devices. They have demonstrated that they are in compliance with the process weight rate equation through calculations. A test will be required to verify compliance for the plate finishing machine. Currently, all dust generating equipment that is vented outdoors with the exception of the plate finishing machine is vented to an approved baghouse. The plate finishing machine will be vented to an approved wet scrubber. With the requirement to vent the equipment to the approved baghouse (**Permit Condition 19.D.**) or wet scrubber (**Permit Condition 19.G.**), the permittees actual emissions from the dust generating equipment do not exceed the limitation of the process weight rate equation for both the baghouse controlled units and the wet scrubber controlled unit. Note that if any of the baghouses are down, the Permittee may still operate equipment normally vented to the device, as long as no emissions from the piece of equipment are vented outdoors.

The maximum process weight rate for the baghouse controlled units was determined by adding the hourly throughput (weight) of each of the treaters based on their respective line speeds and assuming the heaviest product is run. Added to this was the weight of copper going into the presses at their respective maximum capacities. The maximum process weight rate is 2.043 tons per hour. This gives an allowable PM emission rate of 5.59 lb/hr. The

> uncontrolled emission rates submitted by the facility in their Title V application were determined by measuring the dust collected by each baghouse over a known duration of operation. The total of uncontrolled emission rates was calculated as follows: .039 lb/hr (Dicy Tanks) + 4.13 lb/hr (Edge Trimmer 1) + 12.35 lb/hr (Edge Trimmers 2 and 3) + 12.35 lb/hr (Sheeters 2-3) +0.76 lb/hr (Central Vacuum) = 29.63 lb/hr. The facility reports the baghouses are 99% efficient. If a 99% efficient baghouse is used to control all equipment, the controlled emission rate would be 0.3 lb/hr which is well below the standard of 5.59 lb/hr. A test would potentially be required to verify the efficiency of the baghouses for the Torit TJ-460-155 Dust Collector and Torit and Day 49-PJD Dust Collector. However, if the baghouses can meet the standard at 75% efficiency, no test is required. A properly operated baghouse operated in accordance with its O&M Plan is assumed at least 75% efficient. The facility agrees to take credit for a 75% efficient baghouse in order to avoid a test. The facility must assume 75% for compliance, permitting and fee purposes. If the efficiency of all the baghouses is assumed to be 75%, the controlled emission rate is 7.4 lbs/hr which does exceed the standard of 5.59 However, if the Torit and Day baghouse controlling Edge Trimmers 2 and 3 and Sheeters 2 and 3 is assumed to be at least 82.4% efficient, the standard is met. A test will be required to verify the efficiency of the Torit and Day baghouse. If the tests indicates an efficiency less than 82.4%, the rest or a combination of baghouses must be tested until the tested efficiencies enable the PM limit to be met.

> Proper operation of the baghouses in accordance with its O&M Plan will ensure that the source is within the limits specified by the process weight rate equation. To ensure proper operation of the baghouses, the facility will comply with its most recently approved Operations and Maintenance (O&M) Plans and monitor the pressure drop across the baghouses. The pressure drop shall be recorded for each day that the baghouse is in operation (Permit Condition 20.F.1)). The pressure drops are specified in the O&M Plan. If the baghouse is found to be operating outside of the operating range specified in its approved O&M Plan, the Permittee will investigate the cause of the reading. and record the result of the investigation and any corrective action taken, or a finding that the pressure drop returned to the applicable operating range by itself. The facility may find, after some period of operation of the baghouse, that the operating range specified in its O&M Plan is not representative of normal and proper baghouse operation. If the Control Officer or the facility makes such a determination, the facility is required to submit an amendment to the O&M Plan for Control Officer approval to address the necessary revision to the operating range. The revision is to be submitted within 30 days of such determination. (Permit Condition 19.E.7))

> If there are indications that the baghouse is being operated contrary to good engineering practice the Control Officer may require the submittal a Corrective Action Plan (CAP) in accordance with Permit Conditions **19.E.5**)). The Control Officer retains the right to issue compliance notifications at his discretion.

The maximum process weight rate for the plate finishing machine was determined by assuming that the plate finishing machine is designed for 2 plates/hr and those plates average 80 pounds each so that P=2 plates/hr x 80 lbs/plate x ton/2000 lbs = 0.08 tons/hr. This gives an allowable PM emission rate of 0.75 lbs/hr. The facility submitted its maximum uncontrolled emission rate which was determined based on data from a similar grinding machine at the Duren, Germany facility where it is predicted that a maximum of 10 kg may be captured by the scrubber over an 8 hour day. Added to this was an estimated .175 kg/hr lost from the scrubber to give 3.1 lb/hr.

The facility estimates the wet scrubber is at least 88% efficient. If an 88% efficient wet scrubber is used to control the plate finishing machine, the controlled emission rate will be 0.4 lbs/hr which is below the allowable emission rate of 0.75 lb/hr based on a process weight rate of 0.08 tons/hr.

Proper operation of the scrubber will ensure that the source is within the limits specified by the process weight rate equation. To ensure proper operation of the scrubber, the facility will comply with its most recently approved Operations and Maintenance (O&M) Plans and monitor the water level of the wet scrubber. The water level shall be recorded for each day that the wet scrubber is in operation. (Permit Condition 20.H.) The water level will be specified in the O&M Plan. If the wet scrubber is found to be operating outside of the operating range specified in its approved O&M Plan, the Permittee will investigate the cause of the reading, and record the result of the investigation and any corrective action taken, or a finding that the water level returned to the applicable operating range by itself. The facility may find, after some period of operation of the scrubber, that the operating range specified in its O&M Plan is not representative of normal and proper scrubber operation. If the Control Officer or the facility makes such a determination, the facility is required to submit an amendment to the O&M Plan for Control Officer approval to address the necessary revision to the operating range. The revision is to be submitted for Control Officer approval within 30 days of such determination (Permit Condition 19.H.).

If there are indications that the wet scrubber is being operated contrary to good engineering practice the Control Officer may require the submittal a Corrective Action Plan (CAP) in accordance with **Permit Condition 19.H.5**. The Control Officer retains the right to issue compliance notifications at his discretion.

A test is required on the wet Scrubber to verify the plate finishing machine's compliance with the particulate matter emission limit of Rule 311 and this permit. If the test has already been completed prior to the permit issuance and not more than 12 months prior, no test will be required. (**Permit Condition 22.B.**)

### D. Treater 2 Emission Limits (**Permit Condition 18.C**)

Pollutant	Daily Emission Limits	Twelve Month rolling Emission Limits
VOC	165 lb/day	29 TPY

HAPs total	150 lb/day	27 TPY
Dimethyl Formamide	120 lb/day	21.8 TPY
Methyl Ethyl Ketone	15 lb/day	2.8 TPY
Methanol	4.3 lb/day	2.3 TPY
TSP	9 lb/day	1.5 TPY
$PM_{10}$	9 lb/day	1.5 TPY

<sup>\*</sup>The rolling twelve month emissions shall be calculated by summing the total emissions over the most recent twelve calendar months.

[County Rule 210§302.1b]

- 1. The Treater 2 Emission Limits were established under Significant Permit Revision S96-021. The intent of the emission limits were to establish voluntary limits that would keep the Treater 2 modification from triggering NSR when the major modification threshold was 40 TPY for VOC. These limits will stay in place for the Title V. The original VOC limit established under S96-021 have been lowered from 39 TPY to 29 TPY. The corresponding HAP limits were similarly lowered. The reason is explained under the monitoring discussion below.
- 2. Monitoring for Compliance with Treater 2 Emission Limits

The Permittee is required to monitor for compliance with the daily and 12 month rolling emission limits by calculating Treater 2's emissions daily in advance before using any VOC or HAP containing material and by monthly calculating and recording the monthly and 12 month rolling emissions total. Should the VOC emissions reach 26 tons or greater (roughly 90% of the standard), the facility will begin the calculate the monthly and 12 month rolling total on a daily basis. A total enclosure is installed around Treaters 1-3 in accordance with NSPS Subpart VVV. The total enclosure ensures that 100% of the VOCs and HAPs exhausted from the Treaters are captured and sent to the thermal oxidizers. The referenced significant permit revision for Treater 2 requires a 96% efficiency for the thermal oxidizer controlling Treater 2. Because a subsequent permit revision required a 97% efficiency on all three thermal oxidizers, this supersedes the 96% requirement. The most recent tests of the thermal oxidizers provided higher efficiencies than 97%. However, 97% must be used because the tested value cannot be assumed to represent the efficiency of the units at all times. It is assumed that all VOCs and HAPs used in the Treaters are emitted to the Thermal Oxidizer.

The facility reported Treater 2 VOC emissions of 0.53 tons in 2001, 3.96 tons in 2000, and 2.3 tons in 1999. These were adjusted for 97% efficiency to give 1.13, 8.49, and 4.93 tons which are well below the 29 tpy VOC limit. The post control potential to emit for Treater 2 is 32.25 TPY VOC, 22.2 TPY DMF, 2.2 TPY Methanol, 4.16 TPY MEK, and 28.6 TPY Total HAPs. This takes into consideration 100% capture, 97% efficient thermal oxidizer, and line speed limited to 60 ft/min. This unit actually runs at 35 ft/minute. The original 39 TPY VOC limit and the corresponding HAP limits were based on a permit condition requiring 96% thermal oxidizer efficiency. As stated earlier 97% is now the required efficiency so the VOC and HAPs emission limits were

lowered to account for a 97% required efficiency. Example: 39 TPY x (.03/.04) = 29 TPY, 220 lbs/day x (.03/.04) = 165 lbs/day.

The following is an example of the calculations of Treater 2 VOC or Individual HAP emissions:

(A2)(1 - 0.97)(100%) = VOCs or individual HAP emitted

A2 = VOCs or individual HAP used in Treater 2

VOC or individual HAP usage in Treater 2 is calculated according to the following equation.

b

A2 = 
$$\sum_{i=1}^{\infty} [(R2) (\%VOC \text{ or } HAP)_{R2} + (V2) (\%VOC \text{ or } HAP)_{V2}]$$

b= the number of different batches produced during the day (24 hour period)

R2 = Resin Usage in lbs in Treater 2

V2 = Viscosity Solvent in lbs in Treater 2

%VOC or HAP = the weight percent of VOC or individual HAP in the resin or viscosity solvent

# E. County Rule 320 - Odors and Gaseous Air Contaminants(Permit Condition 18.A.3), 19.A.1), 19.A.2)

#### 1. Discussion

County Rule 320 §300, 302, and 303, entitled "Standards", "Material containment Required" and "Reasonable Stack Height Required", respectively, apply to this facility and have been incorporated into the permit conditions. Permit conditions based on County Rule 320 §300 are locally enforceable only.

2. Monitoring for Compliance with Rule 320 Limitations
To monitor for compliance with these requirements, the Permittee is required
(Permit Condition 20.A.3)) to maintain an odor complaint log containing a
description of the complaint, date, time and other information and submit a
copy of this log with the semi-annual monitoring report.

#### F. County Rule 336 – Surface Coating (**Permit Condition 19.B**)

### 1. Discussion - Standards

The facility complies with this rule through use of the Thermal Oxidizers. 336§301.2 allows the Permittee to operate an ECS (Emission Control System) in accordance with §306.1 when applying a coating that exceeds the VOC content limits of Table 1. 40 CFR 60 Subpart VVV and the existing permit conditions requiring a 97% efficiency are more stringent than §306.1 which

only requires 90% efficiency. In addition, Subpart VVV and the permit requires that the rooms surrounding a treater meet the permanent total enclosure requirements of 40 CFR 60.743. This would ensure 100% capture. This is also more stringent than County Rule 336 capture requirements. Only the most stringent requirements will appear in the permit. Rule 336 does require the permittee to maintain an O&M plan for the thermal oxidizers, to comply with all O& M Plans the Permittee has submitted for approval but which have not yet been approved, and to comply with the identified actions and schedules provided in the O&M plan (Permit Conditions 19.B.7a) – c)). The O&M plans for these equipment were approved April 27, 2000. Thermal Oxidizer 3 has since been replaced and a revised O&M plan submitted. The revised O&M plan for the new Thermal Oxidizer was approved March 11, 2003.

Because the facility will be demonstrating they meet the more stringent capture/control requirements and will be complying with the O&M plan requirements of County Rule 336, it can be assumed that as long as they are in compliance, they can easily meet 336§301.2 and §306.1.

- 2. VOC Handling and Disposal Requirements Rule 336 requires the Permittee to cover VOC containing materials when not in use. Finishing and cleaning materials are to be stored in closed or covered leak-free containers. All VOC containing materials intended for disposal shall be stored in closed, leakfree containers which are legibly labeled with their contents and which remain covered when not in use (Permit Condition 19.B.8, 19.B.9)
- 3. Monitoring for Compliance applicable to the Thermal Oxidizers The Permittee shall 1) maintain continuous permanent records of the O&M plans key system operating parameters. (**Permit Condition 20.C.5)b**)). The facility continuously records the combustion temperature of the thermal oxidizers. The facility also records pressure differentials across the total enclosures on a continuous basis. 2) The facility shall make a permanent record of the maintenance actions taken within 24 hours of the action's completion, for each day or period in which the O&M plan requires that maintenance be done (Permit Condition 20.C.5)c)). The Permittee shall keep records of the dates of inspection, dates of service or maintenance and related activities. Records of time, date and cause of all control device failure and downtime shall also be maintained. (Permit Condition 20.C.6). An explanation shall be entered for scheduled maintenance that is not performed during the period designed for it in the O&M Plan (**Permit Condition 20.C.7**) The Permittee shall install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperature, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is functioning properly and is properly maintained. Keep records which demonstrate that the ECS meets overall control standard by §306.1(Permit Condition 20.C.8). The facility has devices to monitor the combustion temperature and differential pressure across the total enclosures.

Rule 336 and the Permit also requires the listing of coatings etc. with the VOC content of each. The permit requires daily usage records showing type and amount used. (See Permit Condition 20.C.1)&3)).

#### G. County Rule 331 – Solvent Cleaning (**Permit Conditions 19.C.1**), 2)

#### 1. Discussion

The facility uses Isopropyl Alcohol for hand wipe cleaning activities. The facility also has a 20 gallon Parts Washer installed in 1989 which uses Safety Kleen Premium Gold Solvent to clean parts. The Parts Washer is a Non-Vapor Batch Cleaning Machine with Remote Reservoir. No cleaning solvent that is heated, agitated, or is nonconforming is used. No special Non-Vapor Cleaning situations occur at the facility. **Permit Condition 19. C.1**) establishes the solvent handling requirements for the 20 gallon Parts Washer and wipe cleaning activities. **Permit Condition 19.C.2**)a) establishes equipment requirements for the 20 gallon Parts Washer. **Permit Condition 19.C.2**)b) establishes specific operating and signage requirements for the 20 gallon Parts Washer. **Permit Condition 19.C.2**)d) establishes requirements for Batch Cleaning Machines applicable to the 20 gallon Parts Washer.

2. Monitoring for compliance (**Permit Condition 20.E.**)

To monitor for compliance, a current list of cleaning solvents which states the VOC content (lb/gal or g/l) of each must be maintained. The amount of cleaning solvent used each month shall be recorded. Keep the value of the VOC vapor pressure of each solvent(other than Low-VOC cleaner) in one of the following forms: a) MSDS, b)Manufacturer's technical data sheet, or c) actual test results.

# H. County Rule 360 -New Source Performance Standards (NSPS) §301.73 and 40 CFR 60 (NSPS) Subpart VVV for Polymeric Coating of Supporting Substrates.

## 1. Discussion

Treaters 1-3, Batch Compounding Tanks, Blend Tanks, and Dicy Tanks are subject to County Rule 360 and 40 CFR 60 Subpart VVV. Treater 1 was installed before the applicability date for NSPS Subpart VVV. However, it was modified in 1996 making it subject. See Attachment 7 of letter from facility dated January 31, 2003. The same is true of Treater 2. Treater 3 was installed after the applicability date for NSPS Subpart VVV and is therefore, subject.

2. Operational Requirements based on NSPS Subpart VVV for Treaters 1-3, Batch Compounding Tanks, Blend Tanks, and Dicy Tanks

The facility complies with the standard for NSPS Subpart VVV through the use of the thermal oxidizers and a total enclosure as allowed by the alternative standard of 40 CFR §60.742 b(2). The Permittee shall maintain a total

enclosure around Treater 1, 2, and 3 and vent the VOC emissions to a 97% efficient thermal oxidizer (**Permit Condition 19.B. 1**)). The NSPS Subpart VVV requires at least 95% efficiency for the alternative standard. However, the significant permit revision S96-029 requires at least 97% efficiency. The permit required a 97% efficiency to aid in keeping VOC emissions from crossing what used to be the major source threshold for NSR. Therefore, the more stringent efficiency is listed as a requirement in the Title V permit. The facility at last test demonstrated that efficiencies were 99.8%, 98.6%, and 98.7% for Thermal Oxidizers 1, 2, and 3 respectively. Thermal Oxidizer 3 was recently replaced and tested. The test results are in to the Department for their review.

Batch Compounding Tanks 1-10, Blend Tanks 1-2, and Dicy Tanks 1-2 are also affected units for this subpart. The Permittee shall maintain a cover on each piece of equipment and vent to a thermal oxidizer that is at least 97% efficiency while preparation of coating is taking place in the vessel. This is allowed by §60.742 c(1). These tanks vent to either Thermal Oxidizer 2 or 3 according to the facility's Title V application.

The facility operates total enclosures around each treater as required by §60.743 (**Permit Condition 19.B.4**)). The criteria for a permanent total enclosure is listed in **Permit Condition 19.B.5**).

# 3. Monitoring/Recordkeeping

§60.744 (e) requires the Permittee to install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the combustion temperature of the Thermal Oxidizer. (**Permit Condition 20.B.1**)).

§60.744h requires a monitoring system be established for the total enclosure. The facility chose to monitor differential pressure for their parameter. The permit condition reads: the Permittee shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the differential pressure across the natural draft openings. (Permit Condition 20.B.2))

§60.744 i-j and **Permit Conditions 20.B.3-4** require the Permittee to record time periods of mixing or coating operations when the thermal oxidizer or the temperature monitor is malfunctioning or not in use. §60.7(b) and **Permit Condition 20.B.5** require the Permittee to maintain records of the occurrence of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunctions of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

I. Additional Requirements that are a result of permit conditions from significant permit revisions S96-021 and S96-029

- 1. The operating speed of Treater 2 is limited to 60 feet per minute (**Permit Condition 19.B.3**). This was established along with the VOC emission limit and required thermal oxidizer efficiency to keep VOC emissions from triggering NSR for the modification which occurred under significant permit revision S96-021. The facility stated that this unit operates at 35 feet per minute and that if it were to operate at 60 feet per minute, an unacceptable product would be produced. (**Permit Condition 19.B.3**))
  - 2. The combustion temperature of Thermal Oxidizers 1,2, and 3 shall be at least 1400 °F unless a lower temperature is shown through an approved test to produce at least 97% VOC destruction efficiency with a CO concentration less than 100 ppmv. This requirement was a condition in the existing significant permit revision S96-029. (**Permit Condition 19.B.6**))

# J. County Rule 310 – Fugitive Dust Sources

1. Discussion

The facility has an unpaved dirt road used both as an emergency exit from the plant and also for hauling steel, scrap materials and equipment to an unpaved open field where these materials are temporarily stored. In all 6 acres of the 17 acres on which the facility is located, is unpaved. These are routine dust generating operations that require a dust control plan to address the open area, vehicle use across open areas, unpaved haul/access road, trackout, and cleanup of trackout. These operations must comply with Rule 310. The facility submitted their Dust Control Plan on April 9, 2003. This plan was incomplete and so the facility was asked to revise their Plan. A revised Dust Control Plan was received on May 5, 2003. A letter was sent dated May 6, 2003 approving the revised Dust Control Plan. The permittee is subject to a 20% opacity (**Permit Condition 18.D.**) limit from these fugitive dust sources and all fugitive dust sources. The dirt road is subject to a 20% opacity and must either meet stabilization requirements or as an alternative, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. (Permit Condition 19.F.1)a)). The Open Area on which no activity is occurring is subject to stabilization requirements. (Permit Condition 19.F.1)b)). Work Practices for the unpaved haul/access road, trackout, and cleanup of trackout are specified in **Permit Condition 19.F.4)).** The Dust Control Plan specifies a primary control measure that must be implemented. A contingency control measure is also specified which must be implemented should the primary prove ineffective. The Permittee shall not allow or engage in the listed routine dust generating operations (unpaved parking lots, bulk material transport,...) without obtaining a revision to his permit (**Permit** Condition 19.F.5).

2. Monitoring for Compliance with Rule 310 Requirements

To monitor for compliance with these requirements, the Permittee shall keep a daily written log recording the actual application of implementation of the control measures delineated in the approved Dust Control Plan. (**Permit Condition 20.G.1**))

# K. County Rule 311 §304 Limitations on Fuel Burning Equipment(Permit Condition 18.F)

#### 1. Discussion

The Boilers 1-3 and Thermal Oxidizers 1-3 burn natural gas as fuel. Rule 311 —Particulate Matter from Process Industries applies to these units because the Boiler supports the process and Thermal Oxidizers control process gases. Specifically, Rule 311§304 applies. The rated heat input capacity of the Boilers is 6.28 MMBtu/hr each. The rated heat input capacity of Thermal Oxidizers 1 and 2 is 6.28 MMBtu/hr. The rated heat input capacity of Thermal Oxidizer 3 is 3.6 MMBtu/hr. The applicable requirement is 311§304 with the following equation for equipment with a heat input rating of 4200 MMBtu/hr or less:

 $E = 1.02Q^{0.769}$ 

where:

E = The maximum allowable particulate emission rate in pounds-mass per hour, and

Q = The heat output in million BTU per hour

Each boiler would then be limited to a maximum of 4.2 lb/hr each based on the rated heat input capacity. Thermal Oxidizers 1 and 2 would be limited to a maximum of 4.2 lb/hr each. Thermal Oxidizer 3 would be limited to a maximum of 2.7 lb/hr. The potential emissions of Boilers 1-3 and Thermal Oxidizers 1 and 2 are calculated to be .047 lb/hr each as determined by the most current AP-42 factors for natural gas burning. Thermal Oxidizer 3 potential PM emissions are 0.027 lb/hr. Potential PM emissions for each unit are well below the applicable PM standard above. Therefore the only other permit condition should be to allow the use of natural gas only to be burned as a fuel (**Permit Condition 19.1**)

# 2. Monitoring and Recordkeeping

Since natural gas is the fuel burned in these units, no other fuel is allowed and the potential emissions from natural gas burning is far below the allowable PM emissions, it can be assumed that as long as good combustion practices are practiced, then these units would be in compliance. Evidence of good combustion could be reasonably determined by the weekly checks for visible emissions required by **Permit Condition 20.A.2**) to monitor for opacity and the corresponding semiannual report required.

# L. Reporting (County Rule 210 302.1e(1), 40 CFR 60.747 and SIP Rule 30)

Reporting Requirements for the facility are found in the General Conditions of the Permit (1-17) and in Subsection 21 of the Permit.

1. Subsection 21 requires the submission of a semi-annual monitoring report, including deviation reporting. The deviation section of the report should be very detailed and should include information such as any day, week or month that any monitoring was required but not performed, a reason for those deviations, and any action taken to ensure that the monitoring will be performed in the future. Additionally, deviations from specified operating ranges or emission limitations or standards should be included, with any additional information. For example, the facility should report any failure to meet the required combustion temperature of the Thermal Oxidizers, the cause of the deviations, the result of the investigation required, and any corrective action that might have been taken. Also, report any days that the temperature was not monitored.

To allow the Permittee flexibility in coordinating the filing of semiannual monitoring reports with the other data gathering and reporting activities at the facility, the Permittee may select the initial reporting period to be less than 6 months. However, follow-up reporting periods must be in 6-month intervals starting from the end of the initial reporting period.

The monitoring report shall also contain:

- a) The results of the facility wide monthly and rolling 12-month VOC, HAPs total, DMF, MEK, and Methanol, HAPs emissions calculations for each month in the six-months reporting period. Any exceedances of the daily emission limits during the six-months reporting period. (**Permit Condition 21.A.1**))
- b) The results of the Treater 2 monthly and rolling 12-month VOC, HAPs total, DMF, MEK, Methanol, TSP, and PM<sub>10</sub> emissions calculations for each month in the six-months reporting period. Any exceedances of the daily emission limits during the six-months reporting period. (**Permit Condition 21.B.3**))
- c) Visible Emissions
  - 1) Dates on which visible emissions observations were taken;
  - 1) Name of the observer;
  - 2) Whether or not visible emissions were present:
  - 4) The opacity of visual emissions determined by a Method 9 reading, if applicable;
  - 5) description of any corrective actions taken, including the date taken, if applicable; and
  - 6) Any other related information.

(Permit Condition 21.A.2)

d) Odor Log

The Permittee shall include a copy of the portion of the odor log which covers the applicable 6 month reporting period in each of the semiannual

compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.

#### (Permit Condition 21.A.3, locally enforceable only)

- e) Parts washer and wipe cleaning activities
  - (1) certification that the operational requirements applicable to the Parts Washer, continue to be in compliance;
  - (2) a summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material;
  - (3) the quantity of each cleaning solvent used during the reporting period;
  - (4) certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above;
  - (5) any new or updated material safety data sheets (MSDS) that may have been obtained during the period; and
  - (6) a summary of any testing that may have been performed during the period.

(Permit Condition 21.D.)

## f) Fugitive dust sources

Any deviation from the approved dust control plan, reason for that deviation and any corrective actions taken.

(Permit Condition 21.E.)

# 2. NSPS Subpart VVV Quarterly reporting requirements (Permit Condition 21.B.1)

Submit Quarterly Reports of the following:

- All 3-hour periods (during actual coating operations) during which the average combustion temperature of the thermal oxidizer is more than 28 Celsius degrees below the average combustion temperature of the device during the most recent performance test that demonstrated compliance.
- b) The Permittee monitoring a total enclosure pursuant to 40 CFR 60.744(h), shall submit a report of all 3-hour periods (during actual coating operations) during which the average total enclosure monitor readings vary by 5% or more from the average value measured during the most recent performance test that demonstrated compliance.
- c) The Permittee not required to submit reports under a) and b) above and §60.747 (d) (4) and (d) (6) due to no reportable periods occurring shall submit semiannual statements clarifying this fact.

- d) Submit reports with the report above of all periods during actual mixing or coating operations when the thermal oxidizer was malfunctioning or not operating.
- e) Submit reports with the report above of all periods during actual mixing or coating operations when a required monitoring device was malfunctioning or not operating

# M. Testing

1. NSPS Subpart VVV requires initial testing for the Thermal Oxidizers. Thermal Oxidizer 3 was recently tested on January 8, 2003. Thermal Oxidizers 1 and 2 were last tested in 1999 or earlier. A performance test has been required for Thermal Oxidizers 1, 2, and 3 anytime within the 2<sup>nd</sup> and 3<sup>rd</sup> year after the issuance of the permit. The performance test is to verify the VOC destruction efficiency from Thermal Oxidizers 1,2, and 3, NOx emission rate and CO emission rate.

Maricopa County Rule 200§309.2 a) thru e) requires that the Control Officer make certain findings in writing before requiring emission testing. The necessity to require testing is substantiated as follows:

- A. The facility will be emitting VOC, NOx, and CO. It has been determined by the USEPA that exposure to these pollutants may adversely affect human health.
- B. The test methods to be used are 25A, 7E, and 10. These are EPA approved test methods shown to produce scientifically acceptable results.
- C. The test methods to be used have been shown to be technically feasible
- D. The test methods to be used have been shown to be reasonably accurate.
- E. After examining the estimated cost of the test, the Department believes that the cost of a stack-sampling test of the control device performance is reasonable to determine the effectiveness of the control device, to demonstrate compliance with the permit limitations, and to establish more recent emission rate data for NOx.
- 2. A test has been required for the wet scrubber installed under minor permit revision 1-31-03-01 to verify compliance with the PM emission limit of Rule 311 for the Plate Finishing Machine. No test will be required if at the time of issuance, the equipment has already been tested in the last 12 months. Justification to require a test is as follows:
  - A. The facility will be emitting  $PM_{10}$ . Exposure to this pollutant has been determined by the USEPA to adversely affect human health.
  - B. The test method to be used is Method 5, an EPA approved test method and has been show to produce scientifically acceptable results.
  - C. The test method used is EPA Method 5 and has been shown to be technically feasible.
  - D. The test method used is EPA Method 5 and has been show to be reasonably accurate.

- E. After examining the estimated cost of the test, the Department believes that the cost of a stack-sampling test of the control device performance is reasonable to determine compliance with the permit limitation.
- 2. A test has been required for the Torit & Day baghouse to verify its efficiency for purposes of demonstrating compliance with the PM emission limit of Rule 311. Justification to require a test is as follows:
  - A. The facility will be emitting PM<sub>10</sub>. Exposure to this pollutant has been determined by the USEPA to adversely affect human health.
  - B. The test method to be used is Method 5, an EPA approved test method and has been show to produce scientifically acceptable results.
  - C. The test method used is EPA Method 5 and has been shown to be technically feasible.
  - D. The test method used is EPA Method 5 and has been show to be reasonably accurate.
  - E. After examining the estimated cost of the test, the Department believes that the cost of a stack-sampling test of the control device performance is reasonable to determine compliance with the permit limitation.

## O. Other Requirements

- 1. The Facility shall submit a Dust Control Plan and get it approved before commencing any routine dust generating operations. This would be for example, for routine bulk material loading, unpaved parking lot, weed abatement by discing or blading, earthmoving not associated with construction (This requires a separate Earthmoving Permit), etc. A dust control plan was submitted and approved for the covered fugitive dust generation operations in the permit. Other conditions concerning existing and future dust control plans are included.
- 2. 40 CFR 63 MACT standards, Subpart OOOO, Fabric Printing, Coating, and Dyeing applies to this facility. The final rule was promulgated on May 29, 2003. A statement of applicability with the future compliance date was included in the permit. The future compliance date is 3 years from the promulgation date. The permit may be reopened prior to its renewal to add the MACT requirements in the future.

## IV NON-APPLICABLE REGULATIONS

A. Compliance Assurance Monitoring (CAM)(40 CFR 64)

Treaters 1-3 controlled by Thermal Oxidizers 1-3 each have pre-control potential to emits greater than the major source level for VOCs and HAPs. The Treaters are subject to an emission limitation where they comply through use of the Thermal Oxidizers. For each treater, the post control potential to emit is below the major source threshold for VOCs. For Treaters 1-3, CAM may be submitted with the Title V renewal. Certain NSPS and NESHAP based emission limits would exempt these units from CAM. Because a MACT is signed for the HAPs, CAM would not apply to those HAPs. Because the NSPS is a pre-1990 rule, CAM would apply to the VOCs.

No other emission units using a control device to achieve compliance with an emission limit has pre-control emissions greater than the major source threshold. Therefore, CAM

would not apply to those units. For example, the highest emitters of  $PM_{10}$  controlled by a Baghouse is Sheeters 2-3 and Edge Trimmers 2 and 3. For the these units,  $PM_{10}$  precontrol < 50 TPY. The sum precontrol emissions of  $PM_{10}$  from the dust generating equipment is > 50 TPY. If CAM is required, no submittal is required until the renewal.

B. County Rule 330 – Volatile Organic Compounds – Treaters are exempt based on 330§307.2 because they are subject to County Rule 336. The Presses do not use any organic solvents. The Presses emit residual DMF contained in the B-stage after treating. The usage of process solvents is done in the treaters and because treaters are already covered by Rule 336 and NSPS Subpart VVV, Rule 330 should not apply to the presses.

# V. MODELING

SCREEN3 modeling was conducted for DMF, MEK, and Methanol according to MCESD "Air Toxics/Hazardous Air Pollutant Permitting Procedure" (2/29/00 Draft). The thermal oxidizer stacks are simplified for modeling purposes into one single stack for purposes of Presses 1 and 2, which emit DMF only, were also modeling DMF, MEK and Methanol. modeled as one stack. The lb/hr emission rates used were based on the lb/day facility-wide emission limits (lb/day x day/24 hrs) for MEK and Methanol. The lbs/hr emission rate used for DMF was also based on the lbs/day facility wide emission limit for DMF to give 13.5 lbs/hr. This amount was distributed between the presses and the thermal oxidizers assuming 65% comes from the thermal oxidizers and 35% from the presses. The Presses were modeled assuming they both emit through the Press 2 vacuum vent. For comparison, a model was run for DMF using the actual emission rates from the presses and thermal oxidizers calculated by taking the average of the emission rates reported in 2000 and 2001 adjusted for 97% efficiency on the thermal oxidizers. Production is highly variable and so the chosen 2 year period (2000/2001) was the consecutive 2 year period over the last five years with the highest average press emissions or which would result in the worst modeling result.

Modeling for the facility was submitted on January 31, 2003. The facility modeled for the thermal oxidizers only. At the time and at present, there are no Ambient Air Quality Guidelines (AAAQGs) for DMF. In keeping with "Air Toxics/Hazardous Air Pollutant Permitting Procedure" (2/29/00 Draft), Will Humble of ADHS(Arizona Dept. of Health Services) was contacted to provide guidance numbers. He provided numbers. The Air Quality Division then modeled the presses and verified facility submitted modeling for the thermal oxidizers for all pollutants. The following parameters were input into the model.

Thermal Oxidizer Stacks
MEK: 2.25 lb/hr
Presses 1 and 2 Stacks
DMF: 4.7 lb/hr

Methanol: 1.5 lb/hr Building Dimensions: 362'L X 202'W X 22'H

DMF: 8.8 lb/hr Exit Gas Velocity: 0.033 fps Building Dimensions: 33 x 16.5 x 50.2 Exit Gas Temperature: 100 ° F

Exit Gas Velocity: 21 fps Stack Dimensions: 10' Height, 8.0" diameter

Exit Gas Temperature: 631° F

Stack Dimensions: 76.6 ft height, 54" dia.

The results of modeling is as follows at the above emission rates and also shows 1 additional model run using actual emissions data for DMF:

Pollutant	CAS	1-hr	24-hr*	Thermal		Presses 1 and 2 Stacks		Under the
	NO.	AAAQG	AAAQG	Oxidizer Stacks				AAAQGs
		ug/m <sup>3</sup>	ug/m <sup>3</sup>	1-hr	24-hr	1-hr	24-hr results	
				results	results	results	ug/m <sup>3</sup>	
				ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>		
MEK	78933	7400	4700	7.28	2.91			Yes
Methanol	67561	2600	2100	4.86	1.94			Yes
DMF**	79469	900	240	28.6	11.5	7520 at or	3008 at or	No
						beyond 35	beyond 35	
						meters	meters	
DMF***	79469	900	240	9.8	3.94	746	298	1 hr (Yes)
								24 hr (No)

<sup>\*</sup> The 1 hr predicted maximum concentration was converted to a 24-hr concentration by multiplying by 0.4

Because DMF concentrations have the potential to exceed the AAAQG Guidance number, the facility was notified of its options such as 1) agree to voluntary permit conditions to reduce offsite concentration, 2) submit less conservative model such as ISC, or 3) make no changes. A letter was mailed to the facility giving them a due date of April 7 to notify us of their option. The facility verbally responded and did not opt to make any changes at this time.

# VI EMISSION RATES

VI EMISSION RATES				
POLLUTANT	POTENTIAL TO EMIT			
PM <sub>10</sub>	35.4 TPY			
SO <sub>2</sub>	0.1 TPY			
NOx	93.19 TPY *			
CO	16.5 TPY			
VOC	98 TPY (Facility Wide Limit)			
HAPs	69 TPY (Facility Wide Limit)			
DMF(VHAP)	54 TPY (Facility Wide Limit)			
Methanol (VHAP)	6 TPY (Facility Wide Limit)			
MEK (VHAP)	9 TPY (Facility Wide Limit)			

<sup>\*</sup> Most of this is attributed to the Thermal Oxidizers based on a NOx test. Most of the NOx is generated by the burning of Dimethyl Formamide (DMF) in the Thermal Oxidizer.

<sup>\*\*</sup> Model using emission rate based on the facility wide emission limit

<sup>\*\*\*</sup> Model based on the 2000/2001 average actual DMF emissions reported on the Emission Inventory ( 0.466 lb/hr – presses, 3.05 lb/hr - treaters)